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POWER MARKETS SHAPED BY ANTITRUST

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ABSTRACT

In November 2011 Sweden abolished the uniform national electricity price and introduced separate price zones. This was the result of an antitrust settlement between the Commission and the Swedish network operator, which was accused of discriminating between domestic and export electricity transmission services and segmenting the internal market. Based on this case, we show how the Commission uses competition law enforcement to foster market integration in the energy sector. We find that, even though the Commission's action under competition rules was contrived and lacked economic depth, the commitment package provides an economically sound, long-term solution to network access and congestion management in Sweden. Such a quick and far-reaching change of Swedish congestion management could not have been achieved by Swedish policymakers or enforcement of the EU sector-specific regulation.

JEL: K21, K23, K40, K42, L43, L44, L94

Keywords: competition policy, Article 102 TFEU, commitment decisions, European energy markets, transmission congestion, Swedish network operator

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INTRODUCTION

Electricity transmission networks can transport only a certain volume of electricity within the system security limits. This is referred to as the transmission capacity of the network. In Sweden, the national power grid lacks capacity to transmit cheap hydro electricity from the northern part of Sweden to the southern areas where there is high energy usage. In order to keep electricity flows within the system security limits, Svenska Kraftnät (SvK), the Swedish network operator, needs to take actions to relieve congestion on the internal bottlenecks.² Congestion management can be defined as actions taken by a network operator to avoid or relieve transmission congestion. In November 2011, the Swedish electricity market was split into separate price areas, which is one of the possible actions to relieve congestion in the Swedish transmission network (so-called market splitting). Interestingly, in spite of an almost decade-long, multi-level debate on handling congestion in the Nordic market, the change in the Swedish market design came neither from the Swedish government, nor from the Swedish or Nordic regulatory bodies. Nor was it prompted by the EU regulations, promoting efficient and transparent congestion management. Instead, it was an outcome of an antitrust investigation launched by the European Commission (the Commission) against the Swedish network operator. Seen from this perspective, EU competition rules can be considered a complementary tool to achieve wider policy objectives,³ in addition to political debate and regulation. In this article, we look at the consequences of using competition rules to solve the problem of the Swedish transmission congestion, and more broadly, to promote EU market integration, against the backdrop of other two tools – political debate and regulation.

First of all, we observe that the commitment procedure greatly facilitates the use of competition enforcement to achieve a primarily internal market objective, that is, to foster cross-border trade in electricity. However, in promoting inter-State trade at all costs, the Commission seems to lose sight of a wider economic and regulatory context of congestion management.

Secondly, this case not only intensifies the Nordic debate on market splitting, but also accelerates the introduction of price zones in Sweden. Lastly, the remedies offered by SvK go beyond what could have been achieved by merely applying the EU sector specific regulation. While existing EU law regulates cross-border congestion management, without prescribing any specific congestion management method to deal with internal congestion, the Commission, by means of competition enforcement, actually pushed through market splitting.

Overall, even though the Commission's action under competition rules is contrived and lacks economic depth, the final commitment to split the market into separate price zones provides an economically sound, long-run solution to Swedish congestion. We conclude that neither a political debate nor regulation would have changed the Swedish congestion management as quickly and to such an extent as an ad-hoc antitrust settlement.

² There are four transmission bottlenecks in the Swedish grid, where demand for electricity transmission frequently exceeds the physical capacity of the network. Three out of them (called "cuts": cut 1, cut 2 and cut 4) occur due to the southbound flow of cheap hydro power. The fourth bottleneck, the west-coast corridor, results from an increased transport from Denmark and the rest of Europe to the western coast of Sweden and further up to Norway. More on the characteristics of the Swedish electricity market see eg NordREG, *Congestion Management in the Nordic Region. A common regulatory opinion on congestion management* (Report 2/2007), 16-18; Commission Decision of 14 April 2010 in case COMP/39.351 – *Swedish Interconnectors*, 28-37.

³ EU competition policy is driven by many, sometimes clashing, objectives such as economic welfare, promoting market integration, economic freedom, fairness and other public policy considerations. For a comprehensive debate on the EU competition policy objectives, see eg M Motta, *Competition Policy. Theory and Practice* (Cambridge, 2004), 17-30. A Jones and B Sufrin, *EC Competition Law* (OUP Oxford, 2nd edn, 2004), 3-18. R Whish, *Competition Law* (LexisNexis, 5th edn, 2003), 17-23.

The article is structured as follows. In section A we introduce the reader to the existing methods of congestion management. This is followed by a brief description of the main facts of the *SvK* case. Then, in section B, we take a closer look at the antitrust investigation itself, particularly at the choice of the legal basis and the procedure. We explain how the Commission employs competition rules to promote market integration and what impact may it have on the outcome of the case. We turn to the other tools in section C, where we discuss the Nordic debate on market splitting, and in section D, we cover the EU sector-specific regulation of congestion management. Section E draws certain conclusions.

A. THE CASE AND ITS CONTEXT

Network operators handle transmission congestion on their national power grids generally in three ways, that is, by 1) market splitting, 2) congestion shifting and 3) counter-trading.⁴ These three common congestion management methods can be combined.

Firstly, in the day-ahead market⁵, a network operator can *split the market* at the network bottleneck point and create one price zone (price area) on each side of the bottleneck. Once the day-ahead market closes, day-ahead prices differ in both areas.⁶ The area of abundant electricity supply (surplus area) gets a lower electricity price than the area on the other side of the bottleneck (deficit area), where electricity is expensive. In this way, congestion between the two zones is resolved by adjusting zonal prices, influencing zonal supply and demand. Zonal day-ahead price differences vary over time, depending on the local electricity demand and supply conditions. At times without congestion, prices in both areas even up, so that there is only one common day-ahead price for all the market.⁷ Until recently, only Italy, Denmark, Norway and the UK had multiple price zones to deal with national congestion.⁸ Most European countries constitute single price areas, that is, the country's borders coincide with those of a price zone.⁹

Secondly, still in the day-ahead market, the network operator can *reduce trading capacities with neighbouring countries*. For instance, it can reduce export from a deficit area within a country, as this will reduce demand for transmission capacity on the national transmission network. In our case, reduced export of electricity from South Sweden to Denmark would relieve congestion on the internal bottlenecks within Sweden. This

⁴ Investment in the network (new transmission lines) would increase its physical transmission capability and hence, relieve congestion in the long run. In the short run, another method to deal with congestion is to perform an intended power outage in area of high consumption (rolling blackout or load shedding). Since this method leaves some customers without electricity, it should be considered a measure of last resort. In fact, TSOs allow for load shedding only in emergency situations to avoid total system blackout. See eg Nordic Competition Authorities, *Capacity for Competition. Investing for an Efficient Nordic Electricity Market* (Report 1/2007), 35-37.

⁵ Elspot, the main platform for trading electricity in the Nordic region, is organised as a day-ahead auction. Elspot is the market for electricity to be delivered the following day, or, to be more specific, the auction for electricity 24 hours in advance of actual delivery in a given time in any day. Power generators offer electricity on this auction based on their ability to produce energy for a specific period on the following day.

⁶ Day-ahead market closes (or “clears”) after all the day-ahead supply and demand bids have been collected and a common day-ahead electricity price has been calculated for all the market on the basis of all supply and demand bids. This price is called market-clearing price (or “system price”). If, due to congestion, market is split into price zones, market-clearing price is set for each zone separately, based on the supply and demand bids in that zone only.

⁷ Note that two adjacent price zones might have identical prices if the line connecting the zones is not congested. Therefore, price zones are sometimes also called “bidding zones” which reflects more accurately the situation where prices are equal.

⁸ Denmark has 2 price areas since there is no direct electricity connection between Denmark West and Denmark East. Norway splits into 2 to 4 price areas, depending on the need. Italian day-ahead market is zonal too, structured in 22 zones. However, while generators are paid at zonal prices, final consumers still face a single electricity price, which is an average of all zonal sale prices weighted by the zonal consumptions (so-called “prezzo unico nazionale”, PUN). Sweden has introduced four price zones in November 2011, as a result of the Swedish Interconnectors case.

⁹ There are 3 cases where price zones extend across national borders: Germany forms one price zone together with Austria, the Czech Republic with Slovakia, and the whole island of Ireland also forms one price zone.

practice, however, creates congestion at interconnectors, that is, cross-border transmission lines.¹⁰ In other words, the network operator “shifts” internal congestion to the borders (congestion shifting). This mechanism divides the market into separate price zones along national borders in order to maintain a single price within a country.

Thirdly, this time in real-time,¹¹ the network operator can affect production and consumption patterns of market participants on both sides of the congested line by taking actions on the so-called balancing market, that is, by *counter-trading*. It makes deals with individual generators and large energy consumers. For instance, it pays generators on the surplus side of the bottleneck to reduce their production. At the same time, generators on the other side of the bottleneck, in the deficit area, are paid to generate more. Alternatively, the network operator can also pay industry consumers to change their consumption patterns. The generation system is re-dispatched¹², but the electricity price that consumers face does not change. They pay a uniform price within a country, no matter on which side of the bottleneck they consume electricity. Prices are only different for the counter-traded volumes. The cost of re-dispatching is born by the TSO. In Sweden, it is then passed on to the grid users through the transmission network tariff.

From the early days of the Swedish electricity market liberalisation in 1996, keeping one single electricity price within the country was seen as a tool to promote (national) competition and market liquidity.¹³ The single price policy excluded market splitting as a method of congestion management. Instead, SvK used to solve internal congestion using the two remaining methods, whereby it mainly shifted congestion to the borders and resorted to counter-trading sporadically, only if congestion shifting alone was not sufficient to relieve internal bottlenecks.¹⁴ SvK’s congestion management based on recurring export reductions triggered protests in the neighbouring countries, in particular in Denmark.¹⁵ In 2006, Dansk Energi (DaE), a trade association for Danish energy companies, filed a complaint to the Commission, claiming that SvK’s capacity reductions at the Øresund interconnector, the line between Sweden and Denmark, caused economic losses to Danish consumers. SvK restricted export of cheap hydro power and Denmark needed to dispatch its own more expensive thermal generation units instead. Electricity day-ahead prices in Denmark increased and became more volatile. In support

¹⁰ By “interconnector” we mean a transmission line which crosses or spans a border between Member States and which connects the national transmission systems of the Member States, as set out in Article 2(1) of Regulation (EC) No 714/2009 of the European Parliament and of the Council of 13 Jul. 2009 on conditions for access to the network for cross-border exchanges in electricity and repealing Regulation (EC) No 1228/2003, OJ L211/15.

¹¹ Most electricity in the Nordic region is traded on the day-ahead market. However, in case imbalances occur after the day-ahead market closes, the TSO can buy or sell electricity in real-time, that is, close to delivery time, to bring the market back in balance. This is called regulating market, where TSO collects upward and downward regulating bids from the balance providers (flexible generators). Since 1999 there is an additional market in Sweden (Elbas) which operates after day-ahead market.

¹² The dispatch is a set of start-up, shutdown and production decisions of all individual generating plants in order to meet total demand. The dispatch is submitted to the network operator after the closure of the day-ahead market. When the production decisions are changed in real-time, then the system is re-dispatched.

¹³ See section B.4(c) below.

¹⁴ According to SvK, counter-trading could not be relied upon all the time, as it required flexibility in generation and some areas lacked such suitable power plants to adjust production levels at a later stage. On the top of that, the Swedish TSO argued that counter-trading was not a suitable method to deal with congestion because its cost was borne by the Swedish grid users, and not by those who benefit from counter-trading, for instance Denmark. For these reasons, counter-trading was considered a complementary method in the Swedish congestion management. SvK used it merely to correct the flow of electricity, so that it does not exceed security limits, rather than to deal with internal congestion (for instance, when there was still some internal congestion which could not be entirely relieved by capacity reductions at the borders or, in case of unexpected outages or forecast errors, to guarantee capacities declared before the market clearing). Swedish Interconnectors – COMP CASE NO 39351: *Background explanations*, *supra* n 39, 24 and 27. See also Energy Markets Inspectorate’s national reports: *The Swedish electricity and natural gas markets 2009* (EI R2010:12), 14. *The Swedish electricity and natural gas markets 2010* (EI R 2011:09), 18.

¹⁵ Complaints came also from Norway. See the letter from the Norwegian Electricity Industry Association to the European Commission of 27 October 2006, *Congestion management – Dansk Energi’s complaint regarding Swedish TSO practice* (ref. 05/078, 742/HOW/SL).

of its case, the trade association cited an empirical study of Copenhagen Economics. The consultants estimated the loss for the Danes from SvK's cross-border capacity reductions and gains for the Swedes resulting from the lower domestic prices.¹⁶ According to DaE, the Swedish congestion shifting was detrimental to competition and trade within the internal market and violated EU competition rules.¹⁷ The complaint was backed by EBL, the Norwegian Electricity Industry Association, due to effects of SvK's likewise reduction of interconnector capacity at the Swedish-Norwegian border.

In April 2009, the Commission opened proceedings against SvK for an abuse of a dominant position on the electricity transmission market in Sweden (Article 102 TFEU¹⁸).¹⁹ According to the Commission, SvK might have violated competition rules by limiting cross-border transmission capacity in order to relieve internal congestion in the Swedish network.²⁰ A few months later in September, as a result of negotiations with the Commission, SvK voluntarily entered into a settlement and offered a set of commitments. Most importantly, SvK agreed to split the Swedish market into four price zones by November 2011.²¹ SvK committed to solve internal congestion by adjusting zonal prices, affecting zonal supply and demand within Sweden, and not by shifting congestion to the borders. In cases, where internal congestion occurs within a price zone, SvK offered not to reduce capacity on the interconnectors, but carry out counter-trading within these zones to relieve it. Secondly, as an interim remedy, before the system of separate price areas becomes operative (within 18 months), SvK agreed to reduce the transmission flow on internal bottlenecks primarily by counter-trading, and not, as far as possible, by shifting it to the national borders.²²

B. INTERNAL MARKET OBJECTIVE REACHED WITH COMPETITION POLICY

In this section we argue that the SvK case is marked with two conflicting goals of EU competition policy: promotion of market integration (which we label "internal market objective") and improving economic welfare (the "market efficiency objective").²³ On the one hand, the market integration objective implies that any obstacle to cross-border trade should be removed. On the other hand, the market efficiency objective requires that

¹⁶ According to their estimations, Danish consumers suffered a loss of DKK 725 million (EUR 97.3 million) arising from higher spot prices (the cost of price volatility has not been quantified). The gain (avoided costs) passed on to Swedish consumers was DKK 215-265 million (EUR 29-35 million). See Copenhagen Economics, *The economic consequences of capacity limitations on the Øresund connection* (Report of 11 December 2006, Copenhagen), commissioned by Energinet.dk, the Danish network operator.

¹⁷ DaE challenged the SvK's policy on several legal bases, namely the internal market rules on free movement of goods (Articles 34 and 35 TFEU), the provisions of the 2nd Energy Package (Regulation (EC) No 1228/2003 of the European Parliament and of the Council of 26 June 2003 on conditions for access to the network for cross-border exchanges in electricity, OJ L176/1, and Directive 2003/54/EC of the European Parliament and of the Council of 26 June 2003 concerning common rules for the internal market in electricity and repealing Directive 96/92/EC, OJ L176, 37-56) and finally, also the EU competition rules (Article 102 TFEU). The full text of the complaint is available at http://www.danskenergi.dk/Aktuelt/Indblik/Svenska_Kraftnaet.aspx accessed on 1 November 2012.

¹⁸ Treaty on the Functioning of the European Union [2008] OJ C115/47.

¹⁹ Case COMP/39.351 – *Swedish Interconnectors*. See Commission Decision, *supra* n 2.

²⁰ DaE's complaint concerned only the Øresund interconnector. However, the Commission broadened the scope of its investigation, including all interconnectors managed by SvK. Commission Decision, *supra* n 2, 38-40.

²¹ Initially, it was agreed with the Commission that the exact number of price zones and their configuration was flexible, depending on the flow patterns in the Swedish electricity network. SvK decided to introduce four new zones.

²² Market splitting does not apply to the west-coast corridor, due to the lack of sufficient suitable generation resources for setting a market price in that area. For the same technical reasons counter-trading cannot be performed there. Instead, SvK undertook to reinforce the west-coast corridor by building and operating a new 400kV transmission line by the end of November 2011. See Commission Decision, *supra* n 2, 14, para 48.

²³ We would not like to enter into a discussion of the possible goals of the EU competition policy, nor subscribe to any of them. See *supra* n 3.

congestion should be solved efficiently, so that it does not deteriorate economic welfare. This means that cross-border trade should be increased only if social benefits of such a policy outweigh social costs.

In our view, the Commission does not distinguish between these two conflicting goals in the *SvK* case. Its arguments are mainly based on internal market rhetoric and neglect a substantial economic analysis. The focus on the internal market objective rules out, from the outset, any possible objective justification of *SvK*'s approach to congestion management before the Commission's investigation. We deal with these issues in detail in subsections B.3 and B.4 and follow up with a discussion on proportionality of *SvK*'s commitments in section B.5. However, before doing this, we make the reader familiar with the political climate and legal concerns, which the Commission might have faced when launching this case (B.1), and the specific procedure it opted for (B.2).

1. Political climate and legal concerns likely delayed the case

The Commission opened antitrust proceedings against *SvK* almost three years after the Danish complaint. This might reflect the initial reluctance of the Commission's Directorate-General for Competition (DG COMP) to take up this case.²⁴ We can only speculate on the political and legal reasons for this delay.

(a) Political climate

One of the main objectives of the Commission in 2006-2008 was to push for further unbundling of the transmission network operators. This was a core element of the Commission's legislative proposal for internal gas and electricity markets (the 3rd Energy Package).²⁵ The Commission argued that a complete separation of transmission business would eliminate all anticompetitive concerns regarding the transmission segment. In line with the Commission's unbundling policy, DG COMP mostly took on cases against vertically integrated companies, which owned both transmission and supply businesses.²⁶ Launching a competition case against *SvK*, an already unbundled network operator, would not necessarily be consistent with the Commission's rhetoric set out during the adoption of the 3rd Energy Package. Once the 3rd Package was adopted in spring 2009, the Commission immediately went ahead to open formal proceedings against *SvK*.²⁷ In fact, the Commission clearly

²⁴ DaE submitted its complaint on *SvK*'s congestion management in July 2006. A competition case was opened in April 2009. The Commission's inaction is not unusual but it stands in stark contrast to the principle of good administration. According to the case law, the Commission must adopt a decision regarding the action it intends to take within a reasonable time (Judgment of the Court of 18 March 1997 in case C-282/95 P: *Guérin Automobiles v. Commission* [1997] ECR I-1503, point 37). For instance, an indicative time limit for informing the complaint of the Commission's proposed action is four months. See Commission Notice on the handling of complaints by the Commission under Articles 81 and 82 of the EC Treaty, 27 April 2004, OJ C101/65, points 60-63.

²⁵ The package consists of two Directives and three Regulations (Directive 2009/73/EC of the European Parliament and of the Council of 13 July 2009 concerning common rules for the internal market in natural gas and repealing Directive 2003/55/EC, OJ L211/94; Directive 2009/72/EC of the European Parliament and of the Council of 13 July 2009 concerning common rules for the internal market in electricity and repealing Directive 2003/54/EC, OJ L211/55/EC; Regulation (EC) No 715/2009 of the European Parliament and of the Council of 13 July 2009 on conditions for access to the natural gas transmission networks and repealing Regulation (EC) No 1775/2005, OJ L211/36; Regulation (EC) No 714/2009 of the European Parliament and of the Council of 13 July 2009 on conditions for access to the network for cross-border exchanges in electricity and repealing Regulation (EC) No 1228/2003, OJ L211/15; Regulation (EC) No 713/2009 of the European Parliament and of the Council of 13 July 2009 establishing an Agency for the Cooperation of Energy Regulators, OJ L211/1). The package was adopted in July 2009 and is applicable since 2011.

²⁶ See cases COMP/39.389 – *German electricity balancing market*, COMP/39.402 – *RWE gas foreclosure*, COMP/39.316 – *GDF Suez gas foreclosure*, COMP/39.317 – *E.ON gas foreclosure*, COMP/39.315 – *ENI*. See also A Hauteclouque, F Marty and J Pillot, "The Essential Facilities Doctrine in European Competition Policy: The Case of Energy Sector", in JM Glachant, D Finon and A Hauteclouque (eds), *Competition, Contracts and Electricity Markets: A New Perspective* (Edward Elgar, 2011), 259-293.

²⁷ The third package received a formal approval from the European Parliament in April 2009 (see IP/09/622, 22 April 2009). In the same month the Commission formally launched investigation in the Swedish Interconnectors case.

saw an opportunity in the case to send a clear message to newly unbundled network operators to respect common market goals when managing congestion on their national grids.²⁸

Moreover, there might have been concerns that this case would bring competition law into the realm of energy policy and sector-specific regulation, since SvK is a state-owned and regulated public utility. This might have signalled a substantial erosion of the competencies of the Swedish state. However, if such concerns ever did exist, then they lost importance in 2008, when the European Courts ruled in two important Article 102 cases. Both cases concerned regulated sectors, telecommunications and pharmaceuticals. In the first case, the General Court upheld a fine imposed by the Commission on Deutsche Telekom (DT) for margin squeeze. The German case was widely contested because the Commission intervened under competition rules even though the DT's pricing policy was permitted by the national regulator.²⁹ The second case, known as *Syfait II* case, concerned a Greek subsidiary of GlaxoSmithKline (GSK). The European Court of Justice (ECJ) took the stance that GSK's refusal to supply with the clear intention to restrict export from Greece violated Article 102 TFEU. The Court found no objective considerations that could justify this behaviour, and ignored the fact that both prices and distribution of pharmaceuticals are subject to extensive regulation in all Member States.³⁰ Taken together, in 2008 the Courts not only gave a clear nod for the Commission's antitrust activity in the regulated markets (*DT* case, *Syfait II* case), but also endorsed the Commission's pursuing of an internal market objective through competition rules (*Syfait II* case).

The fact that Sweden took over the EU presidency in 2009 might have contributed to the quick implementation of the case as well. It is believed that Sweden did not want the case lingering around much longer, as it could undermine the success of its presidency. Lastly, given the already vigorous EU antitrust enforcement in the energy sector, the case seemed to fit well with Commissioner Kroes' priorities.

(b) Legal concerns

The SvK case could have been tackled under competition rules, internal market rules or sector-specific energy rules. Depending on that, the case could have been allocated either to DG COMP, DG MARKT or DG ENER.³¹ The Commission's inaction at the outset might reflect the indecision as to which DG should take this case. As for DG COMP, it might have been unclear whether Article 102 TFEU could constitute a correct legal basis to

²⁸ P Chauve and others, "Swedish Interconnector case. Improving electricity cross-border trade" (2010) 2 *Competition Policy Newsletter*, 3 and 5 *in fine*. See also comments of Commissioner Joaquín Almunia in press release of 14 April 2011, IP/10/425. Using cross-border capacity limitations to relieve internal bottlenecks is a common practice of all national TSOs, even to a much larger degree than SvK. See, for instance, Copenhagen Economics, *supra* n 16, 7.

²⁹ Judgment of the Court of First Instance of 10 April 2008 in case T-271/03 – *Deutsche Telekom AG. v. Commission*, paras 85-89. Deutsche Telekom's appeal to the ECJ was dismissed in 2010. The ECJ upheld the General Court's judgment and confirmed that Article 101 and 102 TFEU do not apply to undertakings in cases when the national regulatory framework requires them to engage in an anti-competitive conduct or when it eliminates any possibility for the undertakings to comply with competition rules. However, if national legislation merely encourages or makes it easier for undertakings to act autonomously in an abusive manner, but leaves open the possibility of complying with competition rules, this does not absolve them from responsibility under Article 101 and 102 TFEU. See Judgment of the Court of 14 October 2010 in case C-280/08 P – *Deutsche Telekom AG v. Commission*, paras 80-82.

³⁰ This case was a follow-up to *Syfait I* case, where Advocate General Jacobs considered in his opinion that GSK's refusal to supply can be objectively justified given, among others, "the pervasive regulation of price and distribution in the European pharmaceuticals sector." Despite that, the Court in 2008 found no justification to GSK's anticompetitive practices. The outcome of this case was hotly debated. See Judgment of the Court of 16 September 2008 in joined cases C-468/06 to C-478/06 *Sot. Lélos kai Sia EE and Others v GlaxoSmithKline AEVE (Syfait II)* [2008] ECR I-7139; Opinion of AG Jacobs of 28 October 2004 in case C-53/03 *Syfait and Others v GlaxoSmithKline plc (Syfait I)* [2005] ECR I-4609.

³¹ DG COMP – Directorate General for Competition; DG MARKT – The Internal Market and Services Directorate-General; DG ENER – The Directorate-General for Energy. As a matter of fact, DaE complained both to DG ENER and DG COMP, arguing that SvK's practices violated internal market rules as well as competition rules. Given the possibility of various legal routes, discussions on case allocation might have involved DG COMP, DG ENER and DG MARKT.

deal with this case. The Swedish network operator is an integral part of the public administration and has no legal personality on its own. It therefore remains under the state's control to some extent. Such close links with the state raise a question of liability: should SvK be responsible for the choice of congestion management method (and be subject to competition rules) or should it be the Swedish state (which failed to comply with the EU law)? Apart of an action under competition rules, the Commission could have also started proceedings against Sweden under Article 258 TFEU for failing to comply with the EU law (action for non-compliance). The Treaty offers a range of provisions which could serve here as a legal basis for the Commission's action through DG MARKT. These could be the internal market provisions on free movement of goods (Article 35 TFEU), the principle of non-discrimination (Article 18 TFEU), or even antitrust rules (Article 4(3) TFEU in combination with Article 102 TFEU). Action for non-compliance can also be based on secondary, sector-specific EU regulation, which would allocate the case to DG ENER. Cross-border trade in electricity was at that time regulated in a directly applicable legislative act – Regulation (EC) 1228/2003.³² Rules on congestion management were appended to the regulation, taking the form of binding guidelines.³³ In fact, the Commission (2007) was plainspoken about its plans to start infringement procedures against Member States for not complying with the internal market rules on congestion management.³⁴ The first wave of infringement proceedings started almost in parallel to the SvK investigation and focused on the lack of transparent access to interconnectors in all Member States.³⁵ The Commission closed proceedings in six cases within one year, but the remaining 19 Member States (incl. Sweden) have been again requested in 2010 to comply with the EU internal market rules, also in the area of congestion management.³⁶ Alternatively, the Commission could have adopted an Article 106 TFEU decision (in combination with Article 102 TFEU) for maintaining in force measures which allow or facilitate congestion shifting by SvK. The Commission relied on Article 106 in 2008, when it took an action in the energy sector against Greece.³⁷ Since the Greek case also involved an abuse of a dominant position (Article 106 TFEU read in conjunction with Article 102 TFEU) the assessment of SvK's behaviour under antitrust rules would seem to be less of an experiment.

However, after investigating the case, the Commission established that SvK acts independently from the Swedish state in the area of congestion management.³⁸ SvK itself underlined its decisional autonomy as a completely unbundled TSO.³⁹ Nor did it ever argue that its conduct was required by state regulation.⁴⁰ In sum,

³² *Supra* n 17. Now it is regulated in Regulation (EC) 714/2009, *supra* n 25, which repealed Regulation (EC) 1228/2003.

³³ Guidelines on the Management and Allocation of Available Transfer Capacity on Interconnectors between National Systems (CM Guidelines), annexed to Regulation (EC) 1228/2003, *supra* n 17, and now to Regulation (EC) 714/2009, *supra* n 25. These are binding guidelines adopted by the Commission on the basis of Article 8 of Regulation (EC) 1228/2003.

³⁴ See Communication from the Commission to the Council and the European Parliament, *Report on the experience gained in the application of the Regulation (EC) No 1228/2003 "Regulation on Cross-border Exchanges in Electricity"* (COM(2007) 250 final, 15 May 2007), 5.

³⁵ MEMO/09/296 and 297, 25.06.2009. Malta and Cyprus were out of scope of the Commission's proceedings, as they are electrically not connected with other Member States.

³⁶ IP/10/836 and MEMO/10/275, 24.06.2010.

³⁷ Case COMP/B-1/38.700 – *Greek lignite*. The Greek case also involved a public undertaking vested with legal monopoly for access to lignite exploration. The Commission used Article 102 in conjunction with Article 106(3) TFEU to induce Greece to remove the existing barriers to the lignite market and lignite-fueled electricity production.

³⁸ Commission Decision, *supra* n 2, point 22.

³⁹ Swedish Interconnectors – COMP CASE NO 39351: *Background explanations submitted by Svenska Kraftnät regarding the offered commitments for this case*, 356/2006/MA30, October 1, 2009, available at http://www.svk.se/Global/02_Press_Info/091001_Background_document.pdf accessed on 1 November 2012, 6-7.

⁴⁰ So-called "regulated conduct defence". This concept describes a specific type of defence, which excludes the intervention under competition rules in cases when an abuse of dominance by an undertaking is required by national legislation and the undertaking in question has no discretion to act differently. The mere existence of regulation which encourages or facilitates abusive conduct does not exempt from the application of competition rules, but in some cases can be considered a mitigating circumstance. See CFI judgment in the *DT* case, *supra*

SvK's statements endorsed the Commission's approach. This eventually might have excluded an action against Sweden under Article 258 TFEU, or an eventual Article 106 decision, and might have prompted the Commission to fall back on antitrust rules as a legal basis.

2. Commitment procedure simplifies the case

In contrast to these initial obstacles, formal proceedings against SvK, once opened, advanced quite quickly and the Commission closed the case within one year. As in most of its previous antitrust actions in the energy sector, the Commission decided to settle the case under the *commitment procedure*, set forth in Article 9 of Regulation 1/2003.⁴¹ This is a simplified procedure by which the Commission formulates its *concerns* about an alleged breach of antitrust rules in a document called *preliminary assessment*. The investigation is much quicker than one done under the standard infringement procedure (Article 7 of Regulation 1/2003). However, this administrative efficiency comes at the expense of analytical depth. For the purpose of a commitment decision, the Commission is not required to find an infringement of competition rules. Neither a dominant position, nor its abuse needs to be established. In turn, much more attention is paid to the remedies. The undertaking in question offers a package of remedies (i.e. commitments) to address the Commission's concerns formulated in the preliminary assessment. If the Commission considers them sufficient to remedy the anticompetitive behaviour, it makes them binding upon the undertaking in a commitment decision and settles the case without concluding on whether there was (or still is) a breach of competition rules. Instead, it concludes that there are no longer grounds for its action. In practice, the final commitment package is the outcome of negotiations between the Commission and the undertaking.

We observe that Article 9 settlements greatly facilitate the use of competition rules as an EU industrial policy tool. The Commission pursues policies of economic liberalisation and integration of markets, which often interfere with national protectionism or interests of local industrial lobby groups. Where political negotiations collapse due to irreconcilable national or industrial aims, direct negotiations with firms under competition rules allow the Commission to achieve its policy goals while keeping national governments and interest groups out of the picture. The loose concept of *concerns* in Article 9 allows the Commission to extend the scope of competition policy to catch practices, which may hamper European integration, but where antitrust aspects may not always be that obvious. Moreover, because an infringement of competition rules does not need to be established in a settlement, the Commission does not really need to come up with a robust theory of anticompetitive harm based on sound economic principles.⁴² It appears that, in the process of modernization of EU competition rules, where *a more economic approach* displaces formalism and requires an effect-based

n 29, points 85-89 and 311. A De Streel, *Background Paper*, prepared for the OECD, *Competition Policy Roundtable on Regulated Conduct Defence* (DAF/COMP(2011)3). See also submission from the European Union.

⁴¹ Council Regulation (EC) No 1/2003 of 16 December 2002 on the implementation of the rules on competition laid down in Articles 81 and 82 of the Treaty, OJ L1, 4 January 2003, 1-25. Nine out of fourteen antitrust investigation launched in the aftermath of the energy sector inquiry were closed with a commitment decision: Commission Decision of 11 October 2007 in case COMP/37.966 – *Distrigaz* (this investigation was running in parallel to the sector inquiry). Commission Decision of 5 March 2008 and Commission Decision of 4 August 2009 in case COMP/38.700 – *Greek lignite and electricity markets* (Article 106(3) in connection with Article 102 TFEU). Commission Decision of 26 November 2008 in case COMP/39.388 – *German electricity wholesale market*. Commission Decision of 26 November 2008 in case COMP/39.389 – *German electricity balancing market*. Commission Decision of 18 March 2009 in case COMP/39.402 – *RWE gas foreclosure*. Commission Decision of 3 December 2009 in case COMP/39.316 – *GDF foreclosure*. Commission Decision of 17 March 2010 in case COMP/39.386 – *Long term electricity contracts in France*. Commission Decision of 4 May 2010 in case COMP/39.317 – *E.ON gas foreclosure*. Commission Decision of 29 September 2010 in case COMP/39.315 – *ENI*.

⁴² The settlements might also have clear advantages for the firms involved. They will be able to avoid a lengthy and costly process, they might avoid paying a fine, and legally their abuse has not been established, so subsequent private claims are less likely to follow.

assessment of anticompetitive behaviour, commitment procedure provides an escape hatch, where the Commission can drop economic welfare standards and pursue other policy objectives. In the following sections, using the *SvK* case as an example, we explain how the Commission employs competition rules to promote market integration, and ignores possible efficiencies of *SvK*'s actions as well as the regulatory context of electricity transmission services.

3. Promotion of market integration as a key objective in the *SvK* case

According to the Commission, *SvK* may have abused its dominant position on the market for electricity transmission in Sweden, and thus infringed Article 102 TFEU, by limiting export capacity on the interconnectors in order to relieve congestion on the national grid. To breach Article 102 TFEU, *SvK* would have to meet the following five cumulative conditions set forth therein: it would have to be (1) an undertaking (2) which abuses its (3) dominant position (4) held within the internal market or a substantial part of it, and (5) this behaviour would have to affect inter-State trade.⁴³ For the purpose of adopting a commitment decision, a breach of Article 102 TFEU does not need to be established, which allows the Commission to only briefly discuss the five-step infringement test.

As already mentioned in B.1(b), it was debatable whether *SvK* could be considered an undertaking for the purpose of Article 102 TFEU (the first element). The classification of *SvK* as an undertaking in the meaning of EU competition rules is of key importance as it determines whether Article 102 TFEU can be applied here in the first place. The Commission establishes in the decision that *SvK* is subject to competition laws. The discussion concerning criteria (3), (4) and (5) seems to be more of a formality. Finding a dominant position within a substantial part of the internal market (3 and 4) is in any case evident, as *SvK* enjoys a legal monopoly for the transmission services in Sweden.⁴⁴ Similarly, since the case concerns cross-border trade in energy, the inter-State effect (5) is beyond dispute.⁴⁵

The core of the Commission's assessment is the (alleged) abuse itself (2). The Commission develops a theory of harm which intertwines anticompetitive concerns (discrimination) with an internal market interest. Firstly, one source of anticompetitive concern is that *SvK*'s practices led to *de facto* discrimination between different network users. *SvK* discriminated on the basis of nationality, since at times of congestion it only refused to satisfy external demand, whereas transmission of electricity reserved for national consumption has never been limited in order to relieve internal bottlenecks. The Commission explicitly refers to the general principle of non-discrimination enshrined in the Treaty,⁴⁶ and recalls that nationality-based discrimination can constitute an abuse of a dominant position in violation of Article 102 TFEU. In fact, the European Courts used to apply Article 102 TFEU to discriminatory practices in the past and the Commission invokes this line of cases to back the *SvK* decision.⁴⁷

⁴³ Jones and Sufrin, *supra* n 3, 261.

⁴⁴ Commission Decision, *supra* n 2, points 24-26.

⁴⁵ *Ibid.*, point 46.

⁴⁶ Article 18 TFEU.

⁴⁷ Case C-82/01 *Aéroports de Paris v Commission* [2002] ECR I-9297, case C-163/99 *Portuguese Republic v Commission* [2001] ECR I-2613, case T-139/98 *AAMS v Commission* [2001] ECR II-3413, case C-18/93 *Corsica Ferries Italia* [1994] ECR I-1783, case 7/82 *GVL v Commission* [1983] ECR 483 and case 27/76 *United Brands and United Brands Continental v Commission* [1978] ECR 9. See Commission Decision, *supra* n 2, text in n 39. All these cases are concerned with practices that were either directly or indirectly discriminatory on the grounds of nationality and, more importantly, they were seen as harmful to the internal market. Some legal scholars consider them a third category of Article 102 abuses, next to exploitative and anti-competitive abuses. See, for instance, Whish, *supra* n 3, 195 and 679. Jones and Sufrin, *supra* n 3, 520.

Secondly, and this is where the internal market rules come into picture, the Commission reasons that SvK's practices contributed to a re-segmentation of the European market along national borders, with artificially low prices in Sweden and higher prices abroad. Hence, the non-Swedish customers could not fully benefit from the internal market.⁴⁸ SvK's policy constituted an obstacle to trade within the internal market. The Commission recalls that Article 35 TFEU prohibits quantitative restrictions on exports and measures having equivalent effect.⁴⁹ It refers to the ECJ case law dating all the way back to the 1966 *Consten and Grundig* judgment⁵⁰ and draws an analogy between SvK's conduct and state measures restricting cross-border trade. According to the Commission, since export restrictions are prohibited under the Treaty, so should be a unilateral conduct of a dominant undertaking with the same objective of restricting cross-border trade.⁵¹

The Commission's theory of harm heavily relies on the general prohibition of nationality-based discrimination and Article 35 TFEU. These are provisions contextually beyond the scope of competition policy,⁵² but the Commission has invoked them directly or indirectly in competition cases whenever it sought to protect the internal market or promote further market integration.⁵³ The case law recalled by the Commission considers market-partitioning practices as *per se* abuses, because they frustrate "the most fundamental objections of the Union"⁵⁴, and because they have the same objective as protectionist measures by Member States, which are captured by internal market rules. The Commission does not depart from this argumentation in the *SvK* case. Its approach remains very formalistic. First, it emphasizes discriminatory nature of SvK's practices, based solely on price comparisons in the day-ahead market. In a companion article we show that this approach lacks economic foundations.⁵⁵ Then, it refers to the *Consten and Grundig* reasoning and concludes that "practices, [which aim at restricting exports of electricity so as to reserve such electricity for domestic consumption], are generally considered to have as their object the restriction of competition". Put differently, the Commission seems to apply in the *SvK* case a *per se* rule, according to which congestion shifting by SvK is abusive as such and cannot be justified on economic welfare standards.

4. Neglecting objective justification

In this subsection we discuss whether SvK's congestion shifting could be justified on legitimate grounds, a question which, in our assessment, did not receive sufficient attention by the Commission. The Commission considers SvK's action an impediment to cross-border trade, and this implies that congestion shifting is abusive *per se*. However, we are convinced that a more relaxed procedural framework of an Article 9 settlement could

⁴⁸ Commission Decision, *supra* n 2, at points 27 and 42-44.

⁴⁹ *Ibid*, point 43.

⁵⁰ Judgment of the Court of 13 July 1966 in joined cases 56 and 58-64 *Établissements Consten and Grundig v Commission* [1966] ECR 299, points 342-343.

⁵¹ The *Consten and Grundig* case was decided in the early days of the European integration. At that time, the Commission's antitrust enforcement, supported by the Courts, was particularly driven by common market considerations.

⁵² Considering the context of the provisions, neither Article 18 TFEU nor Article 35 TFEU is listed under the chapter on competition rules (Title VII, Chapter 1). However, the link between Article 18 TFEU and Article 102 TFEU is comprehensible, given the wording of Article 102, which names discriminatory practices as a potential abuse of a dominant position (Article 102(2)(c) TFEU). There is no such textual link, however, between Article 102 TFEU and Article 35 TFEU, apart from the fact that a breach of Article 102 TFEU requires a cross-border effect.

⁵³ Competition cases involving discrimination based on nationality, *supra* n 47. Competition cases involving export bans and conduct hindering cross-border trade, that is, joint cases 56 and 58-64 *Consten and Grundig v Commission*, *supra* n 50, case 41-69 *ACF Chemiefarma v Commission* [1970] ECR 661, case 27/76 *United Brands v Commission* [1978] ECR 207, case 226/84 *British Leyland v Commission* [1986] ECR 3263, case T-62/98 *Volkswagen v Commission* [2000] ECR II-2707, case T-139/98 *AAMS v Commission* [2001] ECR-II 3413.

⁵⁴ Joint cases 56 and 58-64 *Consten and Grundig v Commission*, *supra* n 50, 340.

⁵⁵ M Sadowska and B Willems, "Market Integration and Economic Efficiency at Conflict? Commitments in the Swedish Interconnectors Case" (2013) 36 *World Competition: Law & Economics Review* 1.

have given room for objective justifications (B.4(a)) such as the ones put forward by SvK: that the action was justified based on efficiency improvements (B.4(b)) and the public interest (B.4(c)).

(a) *Objective justification and commitment procedure*

The reasoning set out in the preliminary assessment suggests that if the Commission was in fact required by the procedure to find an infringement of Article 102 TFEU (which is not required in a commitment procedure), then it would consider SvK's practice as a *per se* abuse. That is, congestion shifting would be presumed unlawful, without allowing evidence to the contrary, by way of justification.

In theory, there are no *per se* abuses under Article 102 TFEU.⁵⁶ As is often reiterated by the ECJ, anticompetitive practices of a dominant undertaking are abusive unless they are *objectively justified*.⁵⁷ The notion of objective justification developed by the Courts is far from clear, as neither the Commission, nor the ECJ has been consistent in its interpretation.⁵⁸ However, the right of a dominant undertaking to defend itself against allegations of abuse on the basis of objective justification is not questioned.⁵⁹ Objective justification is thus a defence under competition rules and, as acknowledged by the Courts and the Commission, it captures practices pursuing legitimate public interest objectives as well as those producing efficiency gains.⁶⁰

A standard infringement procedure under Article 7 of Regulation 1/2003 requires the Commission to investigate the case thoroughly and to adopt a *statement of objections*, which triggers clear procedural rights for the undertaking to defend its conduct against the objections raised therein.⁶¹ In other words, once the Commission finds an abuse, the burden of proof shifts to the undertaking, which can try to justify its practices.

However, the SvK case was settled. In an Article 9 settlement the Commission does not issue a statement of objections, but only formulates its concerns in a *preliminary assessment*. The purpose and content of those documents differ. A preliminary assessment serves an undertaking subject to proceedings as a basis to formulate appropriate commitments, and not to exercise its right of defence. For this purpose, it merely includes the Commission's anticompetitive *concerns*, and not formal *objections*.⁶² A statement of objections is a more substantial document, which not only fulfils the requirements of a preliminary assessment, but goes well beyond that.⁶³

⁵⁶ There is, though, a line of case law, where the Courts seem to consider certain practices *per se* abusive (exclusive supply obligations, loyalty rebates and predatory pricing). However, in more recent cases, the Courts have become less strict and allow objective justification also with regard to these practices. See Opinion of AG RJ Colomer delivered on 1 April 2008 in joined cases C-468/06 to C-478/06 (GSK case), *supra* n 30, points 56-61.

⁵⁷ See eg judgment of the Court of 18 February 1971 in case 40-70 *Sirena S.r.l. v Eda S.r.l. and others* [1971] ECR 69, 17 (the first case, in which ECJ refers to objective justification) or Judgment of the Court of 3 October 1985 in case 311/84 *Centre belge d'études de marché - Télémarketing v CLT and IPB* [1985] ECR 3261, 26-27.

⁵⁸ The concept of "objective justification" lacks a complete theoretical framework, which causes a lot of confusion as to what could constitute objective justification under Article 102. For the purpose of this article it is not necessary to enter into this debate. For an extensive discussion see E Rousseva, "The Concept of 'Objective Justification' of an Abuse of a Dominant Position: Can it help to Modernise the Analysis under Article 82 EC?" (2006) 2 *The Competition Law Review* 2, 27.

⁵⁹ Rousseva, *supra* n 58, 27.

⁶⁰ See Jones and Sufrin, *supra* n 3, 282. Whish, *supra* n 3, 207.

⁶¹ The Commission adopts statement of objections with a view to adopting a prohibition decision. See Commission notice on best practices for the conduct of proceedings concerning Articles 101 and 102 TFEU [2011] OJ C308, 6-32, point 82: "The Statement of Objections sets out the preliminary position of the Commission regarding the alleged infringement of Articles 101 and/or 102 TFEU, after its in-depth investigation. Its purpose is to inform the parties concerned of the objections raised against them with a view to enabling them to exercise their rights of defence in writing and orally (at the hearing). It thus constitutes an essential procedural safeguard which ensures that the right to be heard is observed. The parties concerned will be provided with all the information they need to defend themselves effectively and to comment on the allegations made against them."

⁶² *Ibid*, points 121 and 122.

⁶³ *Ibid*, points 82 and 123. For a short comparison, see also M Kellerbauer, "Playground instead of playpen: The Court of Justice of the European Union's Alrosa judgment on art. 9 of Regulation 1/2003" (2011) 1 *European Competition Law Review*, 3.

Comparing the two procedural routes (Article 9 settlements and Article 7 infringement procedure) we believe there is a risk that the objective justification defence is not sufficiently taken into account in the settlement procedure. Formally, the commitment procedure does not give the undertaking any procedural right to rebut the concerns of the Commission, and in a settlement the dialectic debate is replaced by bargaining over commitments, which might make it more difficult for an undertaking to argue in defence of its actions, and easier for the Commission to disregard them.

This is also apparent from the publicly available case documents, where SvK argues in favour of its congestion management methods both in reply to the DaE's complaint, as well as during the settlement negotiations with the Commission.⁶⁴ Its argumentation is based on both efficiency considerations and public interest objectives (as discussed in B.4(b) and B.4(c) below). The Commission, however, does not take note of this argumentation and only remarks in its decision that SvK did not provide sufficient evidence to objectively justify its conduct.⁶⁵ Hence, the administrative efficiency feature of the commitment procedure appears to absolve the Commission from taking a closer look at the possible reasons for the allegedly abusive conduct.

It is difficult to predict whether the Swedish TSO would have been more successful in justifying its actions under a standard infringement procedure. Objective justification under Article 102 TFEU is rarely accepted in practice, both by the Commission and the Courts.⁶⁶ And even though the Regulation 1/2003 and the Commission's notice on best practices⁶⁷ are silent as to the possibility of using objective justification in the context of a settlement, this does not mean that an undertaking cannot justify its allegedly anticompetitive conduct on objective grounds to strengthen its bargaining position in the negotiations.⁶⁸ Thus, having this indirect role in the negotiations, objective justification can still influence the outcome of the case.⁶⁹

In what follows, we discuss the two arguments used by SvK to defend its congestion management. We believe that the Commission failed to analyse these arguments on their merits. However, we do not want to enquire into whether or not it makes sense for the Commission to assume a more pro-active approach in Article 9 settlements.⁷⁰ Rather, we would like to point out that an electricity network is a complex techno-economic system, where a lot of trade-offs need to be made almost on a continuous basis. A better analysis of this system, and its regulation, could have led to an enhanced definition of the abuse, and as a result, would have given more guidance for network operators and sector-specific regulators.

⁶⁴ Svenska Kraftnät, *The complaint from Dansk Energi regarding the effects on the Danish electricity market of Svenska Kraftnät's congestion management methods*, SvK's reply to the European Commission of 13 November 2006, available at http://www.svk.se/global/01_om_oss/pdf/nattjanst/svar_danskarna2006.pdf accessed on 1 November 2012, 4 and 9. Swedish Interconnectors – COMP CASE NO 39351: *Background explanations*, *supra* n 39, 11. See also explanations of SvK's Director General, Mikael Odenberg, to the Commission in a letter of 22 May 2008, *Case No 39351 – Øresund interconnector* (356/2006/MA30), available at http://www.svk.se/Global/02_Press_Info/Pdf/remissvar/080522_KOM.pdf accessed on 1 November 2012.

⁶⁵ Commission Decision, *supra* n 2, point 45.

⁶⁶ Jones and Sufrin, *supra* n 3, 282. Whish, *supra* n 3, 207-208. Rousseva, *supra* n 58, 35. On the top of that, in order to be justified, the conduct must be proportionate. The application of the proportionality test further limits the scope of this defence.

⁶⁷ Commission notice on best practices, *supra* n 61.

⁶⁸ According to some commentators, bilateral negotiations give an opportunity to the undertaking to explain their conduct to the Commission. See eg S Rab and others, "Commitments in EU Competition Cases, Article 9 of Regulation 1/2003, its application and the challenges ahead" (2010) 1 *Journal of Competition Law & Practice* 3, 175.

⁶⁹ Moreover, the absence of an in-depth analysis of the case might potentially weaken the bargaining position of the Commission, as it cannot provide any strong evidence in support of its anticompetitive allegations.

⁷⁰ On the one hand, the Commission enjoys a greater margin of discretion in the settlement negotiations and could theoretically investigate the reasons behind anticompetitive behaviour on its own initiative. On the other hand, a time-consuming investigation might write off the commonly cited benefit of a settlement – its administrative efficiency. Nevertheless, the Commission's formalistic approach in the SvK case has been pointed out by commentators. See eg A De Hauteclocque and L Hancher, "The Svenska Kraftnät case: introduction of price zones in Sweden" (2011) 13 *Network Industries Quarterly* 1, 20-22. G Cervigni, "The Swedish Interconnectors Case: Electricity market design through competition policy?" (2010) *LECG*, April 2010 (LECG's online article).

(b) *Objective justification based on efficiencies*

SvK maintained that it shifted congestion to the border and preferred not to rely on counter-trading as its cost would be absorbed by the Swedish grid users, and not by those, who benefit from it (i.e. Denmark). SvK argued that it proposed the Danish TSO to share the financial burden of increased counter-trading on several occasions, but its offers were declined.⁷¹

This argument makes some economic sense. Danish consumption creates a negative externality:⁷² it reduces availability of transmission capacity within Sweden. The same applies to the Swedish consumers. If SvK shifts too much of its internal congestion to the border to increase Swedish consumption, it has a negative impact on the Danes, reducing cross-border capacity and thus increasing the cost of energy consumption in Denmark. In our companion article⁷³ we show that SvK can achieve efficient allocation by shifting *some* internal congestion to the border and counter-trading the rest. The optimal amount of congestion shifting depends on the demand levels in Sweden and in Denmark. In social optimum, the electricity day-ahead price in Denmark should be equal to the counter-trading price in South Sweden. Paying this price for their energy consumption, Danish consumers would internalise the cost of congestion they create within Sweden. Still, this does not mean that Denmark should pay a share of the Swedish counter-trading costs, a principle that SvK puts forward. This is because counter-trading costs are not related to the social cost of congestion.⁷⁴ As a result of counter-trading, consumers in South Sweden and producers in North Sweden receive implicit subsidies. Consumers in the south pay a lower day-ahead price than when congestion is priced directly in the day-ahead market, as in the case of market splitting. Similarly, producers in the north receive a higher day-ahead price. Those subsidies consist mainly of transfers from the Swedish network operator to the Swedish network users, and are therefore not a measure of the social cost of congestion, which the Danes would have to pay in order to internalise their negative externality.

In summary, we show that SvK could have had an efficiency objective in mind, when it shifted some of the internal congestion to the border with Denmark. The Commission's cursory assessment of SvK's behaviour does not consider this possibility. Instead, the Commission compares day-ahead prices in Denmark and Sweden and concludes that SvK's practices are discriminatory and lead to market-partitioning. In our companion article we show that the difference in day-ahead prices should not be taken as an indicator for discriminatory behaviour. One would rather need to compare the marginal counter-trading cost in South Sweden with the day-ahead price in Denmark.⁷⁵ A more economic approach to the concept of discrimination would not lead to an outright prohibition of congestion shifting in the first place, and would have given SvK the opportunity to justify its actions on efficiency grounds.

⁷¹ Svenska Kraftnät, *The complaint from Dansk Energi*, *supra* n 64, 4.

⁷² A negative externality is a negative side effect of the consumption of a product on a third party. This concept is common in an environmental context (pollution). When economic agents do not take into account the negative externality of their consumption of a product, the level of consumption of this product will be larger than the social optimum. In order to achieve a socially efficient outcome, those agents need to internalise the externality, so that they take into account the effect of their actions on third parties. This could be done for instance by imposing a tax on the good ("the polluter pays principle") or by the creation of clear property rights.

⁷³ Sadowska and Willems, *supra* n 55.

⁷⁴ The social cost of congestion is equal to the forgone benefit of energy trades from North to South Sweden, which could not take place because of exports from Sweden to Denmark. Hence, the social cost of congestion does not show up in the accounts of SvK, as it refers to a hypothetical alternative usage of the transmission line. There is no direct relation between those forgone benefits and the counter-trading costs.

⁷⁵ For a detailed discussion we refer to our companion article, Sadowska and Willems, *supra* n 55.

(c) *Objective justification based on public interest*⁷⁶

SvK argued that maintaining a common electricity market with a common price was advantageous for Sweden. There were genuine concerns, that splitting the market into smaller price zones would have a negative impact on Sweden, by reducing the liquidity in the wholesale market and hindering retail competition.⁷⁷

As a state-run central administrative authority SvK must act in accordance with the Instruction from the Swedish Government.⁷⁸ This document, issued on a yearly basis, stipulates SvK's guiding principles and also specifies special tasks. According to the Instruction, SvK should promote competition in the Swedish wholesale and retail electricity markets.⁷⁹ In the light of this objective, keeping a single price might have been in line with the Instruction, as it is claimed to make forward and day-ahead markets more liquid and promote retail competition. Interestingly, Swedish government itself commissioned SvK to investigate the possibility of market splitting in Sweden as early as in 1993. SvK claims that similar studies, also delegated by the Swedish government, have been performed over the years and all of them pointed to the risk of weakening competition and reducing liquidity in the sub-markets.⁸⁰ On the top of that, the Swedish stakeholders, headed by the industry association, Swedenergy, were from the outset fairly negative about market splitting. As SvK reports, this scepticism did not end with the implementation of the commitment package and criticism can still be heard.⁸¹

The question arises as to whether SvK was sufficiently autonomous in setting its congestion management system, for instance, whether it could introduce market splitting independently from the Swedish government.⁸² As a public utility, SvK does enjoy decisional autonomy regarding transmission services it provides – it makes decisions and issues regulations.⁸³ Further, congestion management procedures are not specifically regulated in any legislative act.⁸⁴ The Electricity Act sets out criteria on network operation, but these are very general, and include, for instance, the obligation to transmit electricity on reasonable conditions and of good quality.⁸⁵ This all demonstrates that SvK has discretion as to whether to keep Sweden as one Elspot area or to further subdivide it.⁸⁶ However, it appears that keeping one price within Sweden has always been a part of a wider socio-geographic policy. Seen from that angle, supply of electricity at a uniform electricity price within Sweden can therefore be considered a 'service of general economic interest' in a broader socioeconomic sense.⁸⁷ Against this

⁷⁶ Due to conceptual confusion surrounding the notion of objective justification we chose to label the arguments set forth in this section as "public interest objectives", thereby avoiding concepts such as "objective necessity" or "regulatory conduct defence".

⁷⁷ Retailing is the final segment of electricity value chain, that is, the supply of electricity to end-customers. Retail competition exists if end-customers have a possibility to choose their electricity supplier between competing electricity suppliers.

⁷⁸ Förordning med instruktion för Affärsverket svenska kraftnät, 2007:1119 (Government Ordinance with Instruction for Svenska Kraftnät). See also NordREG, *Regulation of the Nordic TSOs – with focus on Market Efficiency and Harmonisation* (Report 7/2007), 12.

⁷⁹ Article 3 of Government Ordinance, *supra* n 78. See also Swedish Interconnectors – COMP CASE NO 39351: *Background explanations*, *supra* n 39, 6.

⁸⁰ See the letter of Mikael Odenberg, *supra* n 64. Finally, in 2008, the Swedish government instructed SvK to start a process of subdividing Sweden into smaller price zones by means of regulation. See Commission Decision, *supra* n 2, point 65. See also discussion in section C.

⁸¹ SvK, *Annual Report 2010*, Director General's Statement, 5. In defiance of these objections, Energy Markets Inspectorate has recently reported that retail competition has not been affected in the first few months after the implementation of market splitting. See Energy Markets Inspectorate, *Elområden i Sverige. Analys av utvecklingen och konsekvenserna på marknaden* (EI R2012:06, 2012). In Swedish only.

⁸² According to the ruling of the General Court in the *Deutsche Telekom (DT)* case, the mere existence of regulation which encourages / facilitates abusive conduct does not exempt a dominant firm from the application of competition rules, but in some cases can be considered a mitigating circumstance. See CFI judgment in the *DT* case, *supra* n 29, points 85-89 and 311.

⁸³ NordREG (7/2007), *supra* n 78, 17.

⁸⁴ NordREG (4/2006), *A Common Definition of the System Operators' Core Activities*, Report 4/2006, 35 (Appendix 1).

⁸⁵ Electricity Act, SFS 1997:857, chapter 3.

⁸⁶ Note that the very fact that SvK offered market splitting as a commitment to the Commission in a bilateral antitrust deal proves this point.

⁸⁷ We do not refer to any specific legal definition of services of general economic interest (SGEI) under the Swedish national regulation. The concept of SGEI is not defined by the EU law. In EU practice, SGEI are economic activities that would not be produced by market forces alone or at least not in the form of an affordable service available indiscriminately to all (see MEMO/11/929 *State Aid: Commission adopts*

backdrop, SvK's decisional autonomy to introduce market splitting might have been *de facto* limited by the national policy of maintaining a common price in Sweden, widely supported by the Swedish market.

5. Proportionality of the final remedy

The introduction of market splitting abolishes the single uniform electricity price which is valid for all the Swedish customers. In other words, it imposes a social policy on Sweden, something which normally remains within the State's own decision making powers. Given this far-reaching intervention in the Sweden's social policy domain, we would like to address the question whether the Commission went beyond its discretionary powers, by extracting disproportionate commitments.

First of all, we should note that the Commission enjoys a broad margin of assessment regarding the proportionality of commitments. According to the recent ECJ judgment in the *Alrosa* case, the principle of proportionality, as a general principle of EU law, applies to commitment decisions, but to a limited extent.⁸⁸ Had the principle of proportionality fully applied, the Commission would have to (a) test whether the accepted commitments address its concerns formulated in the preliminary assessment, and, (b) consider alternative, less restrictive, measures (if they exist and are known to the Commission) and choose those, provided they also address its concerns.⁸⁹ According to the *Alrosa* judgment, in a commitment procedure the second test should be replaced by two weaker requirements. First, (b') the accepted commitments must be the least restrictive (for the undertaking concerned) of all the commitments that were offered by the undertaking and must address the Commission's concerns.⁹⁰ Second, (b'') the accepted commitments must not go *manifestly* beyond what is necessary to address its concerns.⁹¹ Consequently, in a case where an undertaking offers only one set of commitments,⁹² test (b') is trivially satisfied and the Commission only needs to assess whether (a) it meets its concerns and (b'') is not manifestly disproportionate.⁹³

The Commission made SvK's commitments binding in April 2010, that is, while the *Alrosa* case was still pending before the ECJ. This period was marked by uncertainty as to the content of the proportionality test applicable to Article 9 commitments.⁹⁴ Given the lack of clear standards, the Commission came up with an

new package on State aid rules for services of general economic interest (SGEI) – frequently asked questions. 20 December 2011). The concept of SGEI depends on Member States, which impose public service obligations on private or public undertakings (service providers) and define the conditions under which these obligations are carried out. Hence, it would be up for the Swedish state to decide that providing electricity at a uniform price within Sweden is considered a service of general economic interest.

⁸⁸ The principle of proportionality is a criterion for lawfulness of all measures adopted by Union institutions and requires that these measures cannot exceed what is appropriate and necessary for attaining the objective pursued, and that where there is a choice between several appropriate measures, recourse must be had to the least onerous and the disadvantages caused must not be disproportionate to the aims pursued. See eg case 15/83R *Denkavit Nederland* [1984] ECR 2171, para 25; case C-331/88 *Fedesa and Others* [1990] ECR I-4023, para 13; GC judgment of 23 October 2003 in case T-65/98 *Van den Bergh Foods Ltd v Commission* [2003] ECR II-4653, para 201; ECJ judgment of 14 July 2005 in case C-180/00 *Netherlands v Commission* [2005] ECR I-6603, para 103.

⁸⁹ In 2007, the General Court required such a full proportionality test of commitments in the *Alrosa* case, but its judgment has been subsequently overruled by the ECJ on appeal. Judgment of the General Court of 11 July 2007 in case T-170/06, *Alrosa Company v. European Commission* [2007] ECR II-02601, points 112-158.

⁹⁰ Judgment of the Court of 29 June 2010 in case C-441/07 P. *European Commission v. Alrosa Company* [2010] ECR I-05949, points 41 and 61.

⁹¹ *Ibid.*, point 42: "Judicial review for its part relates solely to whether the Commission's assessment is manifestly incorrect."

⁹² Publicly available case documents do not suggest that SvK offered alternative solutions to market splitting (eg increased counter-trading) so we assume this was the case. However, given the settlement negotiations are not public, we cannot take it for granted.

⁹³ In that way, the Commission can accept commitments under Article 9 which may go beyond the remedies it can impose in a standard infringement procedure under Article 7, in which case the principle of proportionality is fully applicable. See also Commission notice on best practices, *supra* n 61, 115, which, referring to the *Alrosa* judgment, expressly states that the commitments can go beyond what the Commission could impose in a standard infringement procedure.

⁹⁴ The Courts were sending out contradictory signals. On the one hand, the General Court stated in 2007 in the same case that the principle of proportionality applies to commitment procedure just as it applies to the infringement procedure. That is, the Commission is required to test whether the proposed commitments are proportionate to the alleged infringement and necessary to meet the Commission's concerns formulated in the preliminary assessment. (Judgment of the Court of First Instance of 11 July 2007 in case T-170/06 *Alrosa Company v Commission* [2007] ECR II-02601.) On the other hand, Advocate General Kokott emphasized the voluntary nature of commitments, and

almost four-page-long fully-fledged discussion on the proportionality of SvK's commitments, which provides an insight in how the proportionality of the commitments would have been tested, if it were required by law. Regarding the first test (a) the Commission states that SvK will no longer *need* to reduce capacity on the interconnectors, once market splitting is introduced. The Commission argues that this sufficiently addresses concerns formulated in the preliminary assessment. Regarding the second test (b), the Commission finds that there is no other remedy which would be equally effective in meeting its concerns.⁹⁵ Resulting price differences do not represent, in view of the Commission, a disproportionate burden for third parties. In this regard, the foreseeable price increase in some areas in Sweden is "an unavoidable consequence of the commitment which brings the alleged discrimination between Swedish and non-Swedish customers to an end." Overall, the Commission concludes that the commitments "are sufficient to address the concerns identified [...] in its preliminary assessment without being disproportionate."

With regard to the first test, we find that market splitting does not sufficiently address the Commission's concerns. It is true that SvK *does not need* to limit export to solve internal congestion. However, it *can* still do it in order to keep the prices in the new price areas at the same level. Indeed, in our companion article we show that despite market splitting, SvK can still shift congestion out of purely strategic reasons (in order to achieve price uniformity).⁹⁶ Therefore market splitting alone, without sufficient monitoring, is not sufficient to address the Commission's concerns. This means that, even in the light of the *Alrosa* judgment, the Commission might have breached the principle of proportionality, in the sense that the accepted commitments (market splitting) might not address its concerns set out in the preliminary assessment.⁹⁷

As far as the second test (b) is concerned, the proportionality of market splitting depends on what the Commission wants to achieve in this case, that is, (A) market integration or (B) economic efficiency. The preliminary assessment suggests that the Commission's objective is (A), as its concerns relate mostly to limiting cross-border capacities impeding market integration and not to inefficient congestion management, which would have been primary concern in variant (B). Had the Commission considered an efficiency standard (B) in its assessment, then market splitting would not have been a proportionate remedy, as a less onerous remedy was at hand. Again we refer here to our companion article in saying that efficient allocation can well be obtained by a combination of counter-trading and partial congestion shifting.⁹⁸ For SvK, this might be a less onerous remedy with no implementation costs, which is equally effective to meet the Commission's concerns regarding inefficient congestion management. However, it seems that the Commission does not seek an efficient outcome, but simply wants to eliminate congestion shifting and thus increase cross-border flows to enhance market integration (objective (A)). If this is the case, then market splitting is more adequate to address the Commission's concerns regarding cross-border trade than any other method which involves cross-border capacity reductions.

argued for more discretion on the part of the Commission in the assessment of proportionality in the settlement cases. Her opinion from September 2009 was a strong signal that, on appeal, the ECJ might overturn the General Court's judgment and grant the Commission wide latitude in the assessment of commitments. See Opinion of AG Kokott delivered on 17 September 2009 in case C-441/07 P. *European Commission v Alrosa Company* [2010] ECR I-05949.

⁹⁵ The Commission briefly discusses network investments as an alternative, but concludes that they cannot constitute an equally effective remedy due to long lead times and uncertainty as to their outcome.

⁹⁶ Sadowska and Willems, *supra* n 55.

⁹⁷ Market splitting would also be considered a disproportionate remedy in a standard infringement procedure under Article 7 of Regulation 1/2003 (full proportionality test) since it would still not pass test (a), that is, it could not be considered an effective means to bring the infringement to an end.

⁹⁸ Sadowska and Willems, *supra* n 55.

C. SVK'S COMMITMENTS IN THE LIGHT OF THE NORDIC DEBATE

In this section we discuss the political context of the SvK case. The idea of introducing market splitting in Sweden is not new. The Swedish government commissioned SvK to investigate the possibility of subdividing Sweden into smaller price zones as early as 1993. At that time it was suggested to put market splitting on hold, due to the lack of sufficient competition and liquidity in the Swedish electricity market.⁹⁹ The movement was rather in the opposite direction, towards integration and the creation of bigger markets. This led to the establishment of Nord Pool in 1996, a joint Scandinavian power exchange, with a day-ahead auction for electricity as the main trading platform (Elspot). At the outset of Nordic integration, cross-border exchanges were limited. As national grids had sufficient transmission capacity to handle domestic flows, congestion within the Nordic countries was not an issue and countries could therefore be defined as single price zones. However, further integration within the Nordic market and with the European continent increased demand for transmission capacity on cross-border lines. Liquid and transparent market allowed well-informed market players to trade electricity across the borders. International transit flows increased the stress on national grids and congestion within the price zones (individual countries) occurred more frequently.¹⁰⁰ As national congestion was managed by reducing cross-border capacity further Nordic integration was obstructed. As a result, national congestion management systems started to be widely discussed between the Nordic countries. The Swedish market splitting debate naturally moved to the regional level. In 2002, Nordel, a platform for cooperation between the Nordic transmission system operators,¹⁰¹ suggested further subdivision of the Nordic market into price areas and, among others, splitting Sweden into three zones. At that time, the Swedish power industry voiced its opposition against Nordel's proposal.

The problem of cross-border congestion at the Swedish-Danish border became particularly acute after November 2005 when Danish day-ahead prices often peaked to extremely high levels. The Danish TSO ascribed these price spikes to the SvK's congestion management.¹⁰² In the same year the Swedish Energy Agency reported that SvK and the other Nordic TSOs were extensively limiting cross-border capacities to relieve internal congestion within their control areas.¹⁰³ Following this report and the Danish complaints, the Swedish government commissioned the Energy Markets Inspectorate (EMI) to explore alternative congestion management methods, in particular market splitting in Sweden and the effects on competition in the Swedish and the Nordic electricity markets. EMI (2006) suggested splitting the market along cut 2,¹⁰⁴ with a sufficient transitory period for the retail market to adjust, but not along cut 4 since it would substantially weaken competition in the area south of cut 4. EMI proposed an increased use of counter-trading for cut 4 instead, whose cost would be shared between the Swedish and the Danish TSOs. The sharing arrangement was motivated by the fact that the Danish customers would profit from increased counter-trading on cut 4, because SvK would not limit cross-border capacity anymore. However, the Danish TSO was reluctant to solve the problem bilaterally.

⁹⁹ See the letter of Mikael Odenberg, *supra* n 64.

¹⁰⁰ Imports come mostly from Norway and Finland. Exports are directed to Eastern and the Western Denmark, Germany, Poland and back to Norway and Finland, but to their Southern parts.

¹⁰¹ In 2009 Nordel was wound up and its tasks taken over by the European Network of Transmission System Operators for Electricity (ENTSO-E).

¹⁰² Energinet.dk, *Report on price formation in November 2005 in Eastern Denmark*, 14 February 2006, annexed to DaE's complaint.

¹⁰³ Swedish Energy Agency, *Hantering av begränsningar i det svenska överföringssystemet för el :ett nordiskt perspektiv*, ER 2005:11(in Swedish only).

¹⁰⁴ See n 2.

Instead, Dansk Energi, the Danish association of energy companies, reported SvK to the European Commission for shifting congestion to the Danish border. DaE complained that SvK's conduct was harmful to Danish consumers. These allegations were based on an empirical study of Copenhagen Economics, which quantified the economic losses due to SvK's congestion shifting.¹⁰⁵ DaE claimed that SvK's practices were detrimental to competition and trade within the internal market and violated EU competition rules.¹⁰⁶ The Norwegian Electricity Industry Association (EBL) supported the Danish complaint. The threat of a case being taken to the European Commission intensified the market splitting debate in Sweden. In 2007, EMI issued a joint report on market splitting in Sweden, in cooperation with SvK and the Swedish power industry, the so-called POMPE report.¹⁰⁷ The Swedish organisations considered a new price border within the Nordic market between the hydro power region in the North and thermal power in the South. The proposed border would not only split the Swedish market along cut 2, but also subdivide Finland and Norway into new price areas. With respect to Sweden, the POMPE report found that the price border along cut 2 would result in a more efficient utilisation of resources, without harming wholesale competition but with adverse effects on Swedish retail competition on a national basis.

The discussion shifted to the Nordic level again with a series of reports. A report prepared for the Nordic Council of Ministers (NCM's 2007 report) highlighted the need for new price areas, independent of the national borders.¹⁰⁸ A second report (NCM's 2008 report) emphasized the inefficiencies of congestion shifting, and showed that increasing the number of price areas from seven to eleven would improve socioeconomic benefits, and it recommended further market splitting.¹⁰⁹ The Nordic Energy Regulators (NordREG, 2/2007) reported that Congestion shifting constituted a common and frequent congestion management practice among all Nordic TSOs, not only the Swedish one,¹¹⁰ and saw this as a ground to change the Nordic price areas.¹¹¹ The Nordic Competition Authorities (2007) analysed the competitiveness of the Nordic electricity market,¹¹² but with respect to the Swedish congestion problems, they mainly referred to the results of the POMPE report.¹¹³ Following those reports, the Nordic Council of Ministers asked the national TSOs in 2010 to investigate the introduction of new price areas, and the Swedish government commissioned SvK to start a process to create several price zones in

¹⁰⁵ Copenhagen Economics, *supra* n 16.

¹⁰⁶ *Supra* n 17.

¹⁰⁷ The Energy Markets Inspectorate, SvK, Swedenergy and the Confederation of Swedish Enterprises, *Price Areas in the Electricity Market*, EMIR 2007:02 (POMPE report), available in Swedish at <http://www.elpriskollen.se/Start/Bibliotek/Rapporter-2007/Prisomraden-pa-elmarknaden-Pompe/> accessed on 1 November 2012.

¹⁰⁸ Ea Energy Analyses and COWI, *Steps for improved congestion management and cost allocation for transit*, Report for the Nordic Council of Ministers, TemaNord 2007:537, April 2007, available at <http://www.norden.org/da/publikationer/publikationer/2007-537> accessed on 1 November 2012, 17.

¹⁰⁹ Ea Energy Analyses, Hagman Energy and COWI, *Congestion Management in the Nordic Market – evaluation of different market models*. Final Report for the Nordic Council of Ministers (NCM), May 2008. From an economic point of view, nodal pricing, which can be considered an extreme case of market splitting (as opposed to a single price area) is an optimal congestion management method, as it ideally reflects the technical aspects of the transmission network. However, in this report, the consultants analyse further market splitting along all bottlenecks based on a model simplified to 11 price areas due to the availability of data. For details, see Final Report, 21.

¹¹⁰ For instance, during dry years, when electricity flows from the Southern Finland to the North, Fingrid reduces export capacity to Sweden, to relieve internal congestion on cut P1 (part of the congestion is eliminated by counter-trading, if feasible). To the contrary, import from Sweden is limited during wet years, when the surplus of electricity in the North of Finland flows to the South, again creating congestion on cut P1, this time in the opposite direction. Similarly, Statnett reduces export capacities towards Sweden to protect Oslo with its high level of consumption during cold winter days, at the same time reducing Sweden's security of supply (so called "Hasle-trappen" or "Hasle stairway"). See NordREG (2/2007), *supra* n 2, 15-16 and 25; Organisation of the Nordic TSOs (Nordel), Nordic Grid Master Plan 2008, Mar. 2008, 28; Statnett's website at <http://www.statnett.no/en/The-power-system/The-power-situation/Handling-of-bottlenecks-and-use-of-Elspot-areas/> accessed on 1 November 2012. See also The Swedish Energy Agency, *Hantering av begränsningar i det svenska överföringssystemet för el: ett nordiskt perspektiv*, 2005:11 (in Swedish only).

¹¹¹ NordREG (2/2007), *supra* n 2, 13.

¹¹² Report from the Nordic Competition Authorities, *supra* n 4.

¹¹³ *Ibid.*, 38-39.

Sweden.¹¹⁴ This process involved consultations with the Energy Market Inspectorate, the Competition Authority, Nord Pool Spot and dialogues with market participants, including generators, traders, distribution network operators and industrial consumers.¹¹⁵ This time, there was no outright opposition from the Swedish industry. However, Svedenergy, the flagship organisation of Swedish power suppliers, suggested waiting with market splitting until the planned investments in the Nordic grid would be finalised.¹¹⁶ Grid reinforcement would, according to Svedenergy, limit the need to introduce multiple price areas.¹¹⁷ At the same time, however, this would postpone market splitting until 2013 at the earliest.

It appears that the Nordic debate on market splitting would sooner or later have led to a subdivision of the Swedish market into smaller price areas. However, the antitrust intervention by the European Commission not only intensified the ongoing discussions, but also most probably accelerated the introduction of price zones in Sweden by several years. Evidently, the progress in the market splitting debate was and would have remained slow, partly because other long-term solutions to internal congestion were pursued in parallel to the debate on market splitting (e.g. Nordel's project of grid enforcement), and partly because many stakeholders tried to press their own clashing interests. Clearly, it was easier to introduce market splitting via an antitrust deal. The bilateral character of a settlement enabled the Commission to negotiate commitments directly with SvK, excluding interest groups' interventions. Of course, any potential opponents to market splitting were given the option to express their concerns about the proposed commitments within a month following their official publication.¹¹⁸ This phase, called market testing, is an obligatory part of the investigation in which the Commission consults the market regarding the impact of the proposed commitments. Any feedback received from the interested third parties has to be taken into consideration by the Commission before rendering the commitments binding upon the undertaking. If the opposing views expressed by the market participants convince the Commission, it may ask the undertaking in question to modify the commitments accordingly. However, it may also find that the observations received in the market test are not serious enough to reconsider the commitments. In such a case, the Commission quotes the opposing views of stakeholders gathered in the consultation, argues why it maintains its position, and accepts the commitments in their initial shape. And this is what happened in the *SvK* case.

Firstly, some stakeholders questioned the adequacy of market splitting as a remedy to tackle internal congestion, arguing for counter-trading and grid investments instead. In response to that, the Commission asserted that market splitting is a sufficient and proportionate remedy to solve the problems identified in the preliminary assessment.¹¹⁹

Secondly, the stakeholders feared that market splitting would increase concentration in the Swedish wholesale, retail and balancing markets and, as far as South Sweden is concerned, it would lead to higher prices.¹²⁰ In this respect, market participants shared the concerns of the Swedish TSO.¹²¹ However, in view of the Commission, market splitting does not increase concentration, but merely reveals the fact that the market is

¹¹⁴ Regleringsbrev för affärsverket svenska Kraftnät för 2009 (Annual Government Regulation Document for Svenska Kraftnät of 2009, available in Swedish).

¹¹⁵ See Swedish Interconnectors – COMP CASE NO 39351: *Background explanations*, *supra* n 39, 13.

¹¹⁶ The so-called "Pakken", a package of five already decided investments in the Nordic grid, included in the Nordel's 2004 investment plan.

¹¹⁷ See Svedenergy, *The Electricity Year 2008*, 8.

¹¹⁸ Article 27(4) of Regulation 1/2003, *supra* n 41.

¹¹⁹ Commission Decision, *supra* n 2, points 51-52.

¹²⁰ In the aftermath of market splitting prices in the southern areas of Sweden have indeed increased. As reported in November 2011, particularly affected were electricity consumers in the southern Götaland. See press release 'Elbolag kritiskt till nya elprisområden' available at <http://sverigesradio.se/sida/artikel.aspx?programid=83&artikel=4795027> accessed 09.12.2012 (in Swedish only).

¹²¹ Svenska Kraftnät, *The complaint from Dansk Energi*, *supra* n 64, 4.

already concentrated. The Commission quotes the NCM's 2008 report, which recommends splitting the Nordic market into smaller price zones.¹²² It also refers to Norway, where retail market remained competitive despite subdivision of the country into Elspot areas. Regarding retail markets, it states that the costs and risks which market splitting poses to retailers (and thus deters entry in retail markets) can be diminished by entering into contracts for differences (CfD)¹²³ and, in the longer run, by investing in new generation. Regarding wholesale and balancing markets and higher electricity prices in South Sweden, the Commission points out that market splitting will decrease market power and lead to price convergence between South Sweden and North Sweden over time, as it sends correct investments signals to the market. In answer to the fears of energy-intensive consumers that higher prices in South Sweden might have a negative impact on their competitiveness, the Commission points out that market splitting creates a level playing field for all industrial consumers in the EU, as price zones reflects the true market conditions. Also, it assures that the Swedish national regulation empowers EMI to monitor electricity prices.¹²⁴

Thirdly, some stakeholders proposed to postpone the implementation of the remedy package until 2013, claiming that an early introduction of price zones puts some of the current financial and long-term supply contracts at risk, as they would change their value. Other stakeholders opted for a longer delay (up to 5 years), until their fixed-price long-term supply contracts with final customers would expire. The Commission rebuts this argumentation, saying that market players in electricity sector are exposed to all kinds of risks and market splitting is just one example of these. It points out that in the light of the market splitting debate stakeholders were aware of an upcoming general change of regulation and the financial risks connected with entering into long-term contracts.¹²⁵

Lastly, some stakeholders were concerned that market splitting might have a negative effect on investments in renewables. Namely, some investment projects in North Sweden, where the largest potential for green energy is located, might appear unprofitable once the energy prices go down in that area. As a result, Sweden would not achieve the 2020 national overall target for the 49% share of green energy in gross final consumption.¹²⁶ This set of arguments was also rejected. The Commission noted that new investments in renewable generation in the North cannot contribute to a larger share of renewables in final consumption for 2020, because energy is mostly consumed in the South and, due to congestion in the grid, more green energy would not be transported there anyway.¹²⁷

Taken together, even though many stakeholders opposed the introduction of the price zones and came up with various arguments against market splitting in response to the Commission's market test, none of them succeeded in stopping or even delaying the implementation of the commitments.¹²⁸ It therefore comes as no

¹²² *Supra* n 109.

¹²³ CfD is a derivative whose reference price is the difference of the system price and a certain area price. CfD are used for hedging against any price differential between the system price and a specific Elspot area price.

¹²⁴ Commission Decision, *supra* n 2, points 53-59.

¹²⁵ Commission Decision, *supra* n 2, points 60-69.

¹²⁶ Annex 1 of Directive 2009/28/EC of the European Parliament and the Council of 23 April 2009 on the promotion of the use of energy from renewable sources and amending and subsequently repealing Directives 2001/77/EC and 2003/30/EC, OJ L 140, 5 June 2009.

¹²⁷ Commission Decision, *supra* n 2, points 70-72.

¹²⁸ However, on the SvK's request, the Commission agreed for a four-month delay in the implementation of market splitting. See Commission Decision, *supra* n 2, points 60-75.

surprise that the SvK's decision to introduce price zones triggered protests in Sweden and has been challenged under Swedish national law.¹²⁹

D. EUROPEAN RULES ON CONGESTION MANAGEMENT

This section takes a closer look at the EU sector-specific regulation as a tool to integrate electricity markets, next to competition rules and political pressure. In subsection D.1 we briefly describe the existing EU rules on cross-border congestion management in relation with congestion shifting, and show in subsection D.2 that SvK's cross-border capacity reductions do not violate EU law. Large legislative developments in the area of cross-border congestion management are forthcoming, as explained in D.3. Although transparency and allocative efficiency of cross-border capacity will improve as a result, market splitting will not be imposed on Member States. Subsection D.4 summarises the effects of EU regulation on congestion shifting.

1. Existing EU rules on congestion shifting

EU laws regarding congestion management on cross-border lines have been under constant development for more than a decade.¹³⁰ For the purpose of our case study we focus on the regulatory regime that existed from 2006 until 2009. At that time DaE's complaint was pending before the Commission, and handling it under EU sector-specific regulation might have been under consideration. As the provisions on congestion shifting in EU law have not fundamentally changed by the adoption of the 3rd Energy Package in 2009, our analysis also reflects the current situation.

It is important to note from the outset that EU law regulates *cross-border* congestion management only, namely congestion arising on interconnectors between the countries. Relieving congestion on *internal* transmission lines is subject to national rules on congestion management. Notwithstanding their limited scope, the EU rules impose restrictions on congestion shifting¹³¹ since it affects *cross-border* transmission capacities.

In 2006 cross-border congestion management was regulated by provisions of the 2nd Energy Package.¹³² Directive 2003/54/EC¹³³ stipulated that TSOs are responsible for ensuring a secure, reliable and efficient electricity system. Further, when managing energy flows in their networks, TSOs should take cross-border trade into account.¹³⁴ Regulation 1228/2003¹³⁵, which is directly applicable in all Member States, spelled out common rules on *cross-border* congestion management, according to which non-discriminatory market based methods are preferred. They applied to congestion management on interconnectors, however not within the countries.

¹²⁹ Appeal by Värnamo Elnät, press release 'Beslut om elprisområdena kan gå till domstol', in Swedish only, available at <http://sverigesradio.se/sida/artikel.aspx?programid=83&artikel=5086389> accessed on 9 November 2012.

¹³⁰ The initiative to create an EU regulatory framework for congestion management on cross border lines started with the 2nd and 3rd meeting of Florence Forum of October 1998 and May 1999. Established in 1998, the Florence Forum is a platform to discuss the creation and development of the internal electricity market and to monitor the market integration process. Participants include governments of the Member States, national regulators, the Commission and, most importantly, market participants: TSOs, traders, consumers, grid users and power exchanges. See Everis and Mercados EMI, *From Regional Markets to a Single European Market*, a study commissioned by the European Commission, Final Report (2010), 16. See also CONSENTEC and Frontier Economics, *Analysis of Cross-Border Congestion Management Methods for the EU Internal Electricity Market*, a study commissioned by the European Commission, Final Report (2004), Executive Summary. Detailed information on the Florence Forum can be found at http://ec.europa.eu/energy/gas_electricity/electricity/forum_electricity_florence_en.htm accessed on 1 November 2012.

¹³¹ For instance, already in 2007 the Commission threatened to start infringement procedures against Member States for non-compliance with the provisions of the 2nd Energy Package regulating cross-border congestion management, at that time in force (see *supra* n 34).

¹³² A legislative package for an internal gas and electricity market in the EU, replaced in 2009 with the 3rd Energy Package.

¹³³ Directive 2003/54/EC, *supra* n 17.

¹³⁴ Article 9 (c) of Directive 2003/54/EC, *supra* n 17.

¹³⁵ Regulation (EC) No 1228/2003, *supra* n 17.

Nevertheless, Regulation 1228/2003 required all TSOs to give maximum interconnector capacity to the market, within the system security limits.¹³⁶ The first version of Congestion Management Guidelines (CM Guidelines) annexed to the Regulation, while not imposing any specific (again, cross-border only) congestion management method on the TSOs, gave some indication of favoured mechanisms. Namely, they stated that “the possible merits of [...] market splitting [...] for solving ‘permanent congestion’ and counter-trading for solving ‘temporary congestion’ shall be immediately explored as more enduring approach to congestion management.”¹³⁷ Thus, both market splitting as well as counter-trading were explicitly mentioned in the CM Guidelines as the methods in preference for dealing with *cross-border* congestion. The CM Guidelines were amended by the end of 2006, which was shortly after DaE submitted its complaint to the Commission.¹³⁸ The new version of these Guidelines explicitly stated in paragraph 1.7 that “TSOs shall not limit interconnection capacity in order to solve *congestion inside their own control area*”, save for the reasons of (a) operational security, (b) cost-effectiveness, and (c) minimization of negative impacts on the internal electricity market.¹³⁹ If the TSO shifts internal congestion to the borders for any of these reasons, it needs to describe such instances and make it available in a transparent way to all the system users. Finally, according to this new version of the CM Guidelines, these exceptional cross-border capacity reductions were just a stopgap measure, and should not have been considered a permanent solution to congestion problems. They were allowed temporarily, until a long-term remedy was to be found. The Guidelines did not impose any deadlines to introduce long-term mechanisms to tackle congestion problems, but they required TSOs to develop plans for achieving such long-term solutions and to present them on a transparent basis to all system users.¹⁴⁰

The start of formal antitrust proceedings in the SvK case coincided with the adoption of the 3rd Energy Package in 2009. The old Regulation 1228/2003 is now replaced with Regulation 714/2009¹⁴¹, however paragraph 1.7 of CM Guidelines on congestion shifting has been adopted in the 3rd Energy Package as it stands and thus still remains applicable.¹⁴²

2. The existing EU regulation on congestion shifting – what does it mean for the TSOs?

The previous subsection described the EU law on cross-border congestion management in relation to congestion shifting. In this section we argue that SvK’s practice of congestion shifting did not violate EU law. Under the existing EU regulatory regime, the national TSOs have some leeway as to the way they deal with internal congestion. Cross-border capacity reductions are allowed as a method of last resort, provided that network operators are transparent about them and can justify them on one of the three grounds set out in the CM Guidelines, that is, (a) operational security, (b) cost-effectiveness, and (c) minimization of negative impacts on

¹³⁶ See Article 6 of Regulation 1228/2003, *supra* n 17.

¹³⁷ *Supra* n 33, Principles governing methods for congestion management, point 3.

¹³⁸ The Commission was empowered by the 2nd Energy Package to amend the CM Guidelines in order to ensure that congestion management methods in use are compatible with internal market objectives. Given the unsatisfactory results of the 2005 energy sector inquiry, the Commission amended the CM Guidelines already in 2006. Commission Decision of 9 Nov. 2006 amending the Annex to Regulation (EC) No 1228/2003 on conditions for access to the network for cross-border exchanges in electricity, 2006/770/EC, OJ L 312, 11 November 2006, 59-65, and Article 8 (4) of Regulation 1228/2003.

¹³⁹ *Ibid*, para 1.7. Introduction of these exceptional grounds was strongly supported by Germany.

¹⁴⁰ *Ibid*, para 1.7.

¹⁴¹ Regulation (EC) No 714/2009, *supra* n 25.

¹⁴² CM Guidelines, annexed to Regulation (EC) No 714/2009, para 1.7

the internal electricity market. All three criteria are sufficiently broad to explain various instances of congestion shifting.¹⁴³

Operational security (a) is defined by the CM Guidelines as “keeping the transmission system within agreed security limits.”¹⁴⁴ The system security reason, in particular, is a plausible justification, if counter-trading is not possible, for instance, due to the lack of suitable regulating resources. In order to avoid blackouts, a network operator might prefer to reduce the excessive flows in the grid already in the day-ahead market, by shifting congestion to the borders, instead of running the risk of failing to perform necessary counter-trading in real-time. From the operational security’s perspective congestion shifting could be thus considered a safer method than counter-trading.

Justifying congestion shifting on the grounds of cost-effectiveness (b) is also possible. However, the concept of cost-effectiveness is not further explained, which somewhat complicates the assessment. The CM Guidelines are silent as to what cost should be considered in order to justify congestion shifting. Should it be cost for the society as a whole or the cost for the network operator only? In our companion article we look at congestion shifting from an economic welfare perspective and we find that a combination of congestion shifting and counter-trading may be socially optimal.¹⁴⁵ In that case, shifting *some* congestion to the border reduces social cost in comparison to the other two methods (counter-trading *alone* or congestion shifting *alone*). Hence we show that a network operator can justify *some* congestion shifting on the grounds of (social) cost-effectiveness. If, on the other hand, we consider cost-effectiveness in a narrow sense, that is, as a cost for the TSO, the assessment is somewhat different. Since counter-trading is costly, the more congestion the network operator shifts to the border, the more cost-effective his congestion management is.¹⁴⁶ Thus, with a narrowly defined concept of cost-effectiveness the network operator can justify *not only some* limited socially optimal amount of congestion shifting, *but all* its congestion shifting. In other words, depending on how the concept of costs is understood under the CM Guidelines, TSOs can justify either *some* or *all* of their congestion shifting on the grounds of cost-effectiveness.

Minimization of negative impacts on the internal electricity market (c) is the third and last justification ground. Just as in the previous case, the Guidelines do not provide further explanation of this rather broad precondition. This allows for various interpretations, making it a catch-all criterion. Read in conjunction with (a) and (b), it allows for balancing the market integration objective with considerations of efficiency and operational security. Namely, various negative impacts of congestion shifting on internal market in a broad sense (for instance, reducing market liquidity, transparency, and competition in some areas, increasing uncertainty or market power), are weighed against efficiency losses and higher blackout risks connected to the increased reliance on counter-trading. Under such an interpretation of the Guidelines, the TSO could still shift some congestion to the borders and nevertheless comply with the Guidelines, provided it can demonstrate that the amount of congestion shifting is optimal and, at the same time, its negative effects on the neighbouring zones are reduced by the use of counter-trading.

¹⁴³ As we explain further below, we do not consider market splitting an alternative to congestion shifting when analysing the three justification grounds (a-c) in the CM Guidelines.

¹⁴⁴ Note 1 of the CM Guidelines, *supra* n 142.

¹⁴⁵ Sadowska and Willems, *supra* n 55.

¹⁴⁶ Note, however, that even though counter-trading is costly for TSOs, those costs consist mainly of transfers to generators, and are therefore not true social costs. Counter-trading might give generators wrong long-term investment incentives, but those social costs are very hard to identify.

Having said that, we would like to remark that congestion shifting would be more difficult to justify (and this refers to all three justification grounds equally) if market splitting was considered an alternative option for the TSO, next to counter-trading and congestion shifting. For instance, operational security (a) can well be achieved by splitting the market into price zones, as it also eliminates risks connected to counter-trading, just as congestion shifting does. Regarding the second justification ground (b), it would be more difficult to accept cost-saving reasons of congestion shifting if market splitting was an option for the TSO, regardless of what definition of costs we assume, whether that is social costs, or the costs to the TSO. In our companion article we show that market splitting is not only socially optimal, but it also brings higher revenues to the TSO than the case of shifting all of its congestion to the borders. Therefore, as long as market splitting is possible, it is as effective as congestion shifting in terms of minimising social cost, and is more effective than congestion shifting in terms of minimising costs to the TSO. Similar considerations regarding advantages of market splitting as a method minimising negative impacts on the internal market (c) apply.

However, in our opinion, market splitting cannot provide a short-run viable alternative to congestion shifting and counter-trading in the light of paragraph 1.7 of the CM Guidelines. Market splitting constitutes a substantial change in national market design. It requires adaptation of market routines, IT systems and also national regulation, not to mention a certain degree of political endorsement. Implementation of market splitting takes time, therefore this solution cannot be taken into consideration when determining, under this provision, whether separate instances of congestion shifting are justified on the above listed grounds (a, b and c). The imprecise wording of CM Guidelines allows for such an interpretation. As mentioned in subsection D.1 above, instances of congestion shifting shall be tolerated only until *a long-term solution* to internal congestion is found. The provision leaves it to the network operators to develop the methodology and projects of a long-term solution, without giving further guidelines in that respect. Market splitting, which took SvK a year and a half to implement, can be considered a long-term (or at least medium-term) solution, which cannot be considered a readily available option for the network operator in case internal congestion occurs. For this reason we do not take market splitting into account, when discussing the three preconditions.¹⁴⁷

Summarizing subsection D.2, we conclude the following. First, current EU sector-specific regulation allows national TSOs to shift internal congestion to the borders. Even though the CM Guidelines generally do not permit congestion shifting, they formulate three justifications for doing so, which are broad and vague enough to justify much of current practice by many European network operators. This also the opinion of NordREG who stated in 2007 that congestion shifting is not as such prohibited by the EU law. It suggested that the Nordic TSOs can still ensure compliance with the 2006 CM Guidelines while shifting congestion to the borders, by describing transparently the reasons for cross-border capacity reductions and their effects.¹⁴⁸ Second, the Commission would not have been able to impose market splitting in Sweden based on existing EU rules. Since the CM Guidelines regulate *cross-border* congestion management only, they do not impose any specific method for relieving *internal* congestion on national lines. If the network operator cannot relieve internal congestion without cross-border capacity reductions, the only requirement imposed by the EU law is to develop alternative methods

¹⁴⁷ Also investments in grid reinforcements, which can take years of planning and building, can reduce the need for congestion management and congestion shifting in the long run. For instance, NordREG's Report (8/2007) names the Nordel's five prioritized investments in the Nordic grid, *supra* n 116, as long-term solutions to internal congestion in the meaning of the CM Guidelines. See NordREG, *Congestion Management Guidelines* (Compliance Report 8/2007), 10. However, we do not believe that network reinforcements will fully eliminate the need for congestion management.

¹⁴⁸ *Ibid*, 5.

to deal with such congestion in the long run and to present them transparently to the system users. Nevertheless, it is for TSOs to choose a long-term method and its introduction date.

3. The new CACM network code and its impact on congestion shifting

The EU regulation of cross-border congestion management does not stop with the adoption of the 3rd Energy Package. Regulation 713/2009 of the 3rd Package creates the Agency for the Cooperation of Energy Regulators (ACER) with focus on cross-border issues and the internal energy market.¹⁴⁹ Regulation 714/2009 of the 3rd Package establishes ENTSO-E, the European Network of Transmission System Operators for Electricity, and mandates it to develop a cross-border capacity allocation and congestion management (CACM) network code.¹⁵⁰ The ENTSO-E's final proposal for the CACM network code has been submitted to ACER for evaluation in September 2012,¹⁵¹ and is expected to enter into force in 2014 following the adoption by the Commission.¹⁵² The CACM network code will take form of a binding EU Regulation, amending the CM Guidelines where necessary. It will be directly applicable in all Member States, without the requirement of transposition into national law. As with all other network codes developed by ENTSO-E, the CACM network code has to be in line with Framework Guidelines adopted by ACER in 2011.¹⁵³ ¹⁵⁴ Those Framework Guidelines are themselves not legally binding, but they specify general requirements that the CACM network code should satisfy. As the CACM network code implements ACER's Framework Guidelines and will become binding law, we focus our discussion on the code and not on the Framework Guidelines.

Regulation 714/2009 provides that the CACM network code regulates *cross-border and market integration* issues, and should not replace national network codes which do not affect cross-border exchange.¹⁵⁵ This wording suggests that the new network code should not interfere with regulation of congestion management at national level. In particular, it should not state whether a country should be split in smaller price zones or use counter-trading. However, any national arrangement which reduces export capacities to relieve internal congestion affects cross-border trade, and as such might be subject to the CACM network code. The CACM network code states that “[t]ransmission system operators will use a common set of remedial actions^[156] to deal with both internal and cross zonal congestions” and that they “will coordinate the use of remedial actions in

¹⁴⁹ Regulation (EC) No 713/2009, *supra* n 25.

¹⁵⁰ The EU network codes define “obligations or requirements for entities that operate, plan or use the European electricity transmission system.” See ENTSO-E's *Network Codes Development Process*, 17 February 2012, 4.

¹⁵¹ At the time this article was submitted for publication, the CACM network code, in version submitted by ENTSO-E, was evaluated by ACER. In this article we refer to the ENTSO-E's final proposal of 27 September 2012, Network Code on Capacity Allocation and Congestion Management, which can be found at <https://www.entsoe.eu/resources/network-codes/capacity-allocation-and-congestion-management/> accessed on 1 November 2012.

¹⁵² The EU network codes will be adopted by the Commission in a comitology process, according to the regulatory procedure with scrutiny (RPS). Article 6 (11) read in conjunction with Article 23 (2) of Regulation (EC) No 713/2009, *supra* n 25. See ENTSO-E Draft Work Program 2012-2013, version 26 June 2012, downloadable from <https://www.entsoe.eu/the-association/entso-e-work-program/> accessed on 1 November 2012, 6.

¹⁵³ ACER, *Framework Guidelines on Capacity Allocation and Congestion Management for Electricity* (ACER's Framework Guidelines), FG-2011-E-002, 29 July 2011, available at http://www.acer.europa.eu/portal/page/portal/ACER_HOME/Public_Docs accessed on 1 November 2012. ACER's Framework Guidelines were actually drafted by the European Regulators' Group for Electricity and Gas (ERGEG), a body gathering the heads of all national energy regulatory bodies and advising the Commission on energy market issues. In 2011 ERGEG was dissolved and its tasks (also development of the Framework Guidelines) were taken over by ACER.

¹⁵⁴ As the third package provides for, the CACM network code has to be in line with the Framework Guidelines. Article 6 (6) of Regulation (EC) No 714/2009, *supra* n 25.

¹⁵⁵ Recital 7 and Article 8 (7) of Regulation (EC) No 714/2009, *supra* n 25.

¹⁵⁶ Remedial actions are defined as measures to relieve physical congestions. Article 2 of the CACM network code, ENTSO-E's final proposal of 27 September 2012, *supra* n 151.

capacity calculation to facilitate more efficient capacity allocation.”¹⁵⁷ The code thus foresees application of similar congestion management methods *both for internal and cross-border lines* at least at a regional level. This can include, for instance, counter-trading actions within zones, across zones or across countries; or internationally coordinated use of circuit breakers and switches to better address transmission constraints; or changes in network topology.¹⁵⁸ Establishing such a common set of remedial actions will require harmonisation of national and regional congestion management rules.

Moreover, the CACM network code is going to change how cross-border capacity is determined. Currently, transmission capacity available for trade between two countries is determined *bilaterally* for each interconnector by the neighbouring TSOs. This means that each of the two TSOs sets a forecasted capacity value for that interconnector given operational security constraints of their respective networks. The lower of the two values is then accepted as the transfer capacity available for trade to the market. This capacity is called the Net Transfer Capacity (NTC). The CACM network code foresees that capacity calculations shall be done in a coordinated way at least on a regional level and will be flow-based, although the implementation of those changes might take some years.¹⁵⁹ The advantage of regional flow-based capacity calculation is that it takes the physical characteristics of the network into account and therefore uses transmission capacity more efficiently.¹⁶⁰ It will also prevent discrimination between capacities allocated to different interconnectors.¹⁶¹

However, the regional flow-based capacity calculation method does not inhibit TSOs from discriminating *between national and cross-border flows*, and congestion shifting can still take place during the calculation of flow-based transmission capacities at the regional level. Regional capacity calculation will be based on data provided by the network operators. For their part, network operators will still need to make assumptions about energy flows that pass over their respective networks *without* international trade¹⁶² and under a number of

¹⁵⁷ Recital 22 of the CACM network code, ENTSO-E’s final proposal of 27 September 2012, *supra* n 151.

¹⁵⁸ Article 2 (2) of the CACM network code explicitly defines remedial actions which are not fully controlled by the TSO in charge of a control area in which congestion takes place as Cross Control Area Remedial Actions. This implies that remedial actions include actions to relieve internal congestion which are currently performed internally by the relevant TSOs. All TSOs within one Capacity Calculation Region shall coordinate regarding the use of remedial actions for capacity calculation and their real-time application (Recital 22 and Article 30 (6) of the CACM network code, ENTSO-E’s final proposal of 27 September 2012, *supra* n 151). Further, each Coordinated Capacity Calculator (set at the regional level) shall optimize cross-border capacities using available remedial actions (Article 34 (6) of the CACM network code ENTSO-E’s final proposal of 27 September 2012, *supra* n 151).

¹⁵⁹ See Article 24 of the CACM network code, ENTSO-E’s final proposal of 27 September 2012, *supra* n 151. Whereas the CACM network code strongly recommends the flow-based (FB) capacity calculation and allocation method, the use of NTC is still permitted, especially for non-meshed networks (e.g. the Nordic market) and in cases where the FB method does not (1) ensure system security, (2) lead to an increase in social welfare (3) provide market participants with sufficient time to adopt their processes. Further, the FB method has not been in operation yet and it requires more experiments with real data before its implemented. See ENTSO-E, *Network code on Capacity Allocation & Congestion Management Supporting Document, A consultation document to support the assessment of the draft network code* (Supporting Document), available at <https://www.entsoe.eu/events/cacm-nc/> accessed on 1 November 2012, 19-20.

¹⁶⁰ Electricity flows through the transmission network according to the laws of physics, along the lines of least resistance between its source and destination, just like water flows through a network of canals. By assigning a certain transfer capacity to one interconnector (NTC) in order to enable a cross-border transaction, the network operator ignores the physics, because in reality the contracted electricity flows along many parallel interconnectors to reach the point of destination abroad. These “unscheduled” flows are taken into account in a flow-based capacity calculation resulting in a more efficient use of interconnectors.

¹⁶¹ This can be explained easily with an example. Suppose that country A can export to countries B and C. For the reasons of system security total exports (that is the sum of exports to countries B and C) must not exceed a fixed transmission capacity K, which is determined by the physical constraints of the network. In the NTC approach, the network operator in country A would have to divide total export capacity over the cross-border lines in an ad-hoc way, by setting one NTC value for exports from A to B and one from A to C. In the flow-based approach, the network operator does not set a specific capacity value at each border, but gives all the information on the physical constraint to the power exchanges. Those exchanges will then simultaneously operate all regional price zones, ensuring efficient use of the network. Access to the transmission capacity will not be ad-hoc, but based on competitive pressure.

¹⁶² Note that even if there is no international trade between price zones, flows in one price region might be influenced by loop flows caused by regional imbalances in other price zones. Those loop flows will not create net imports or exports in a price zone, but will affect individual transmission lines.

contingencies,¹⁶³ before determining how much transmission capacity is left for international trade. This method implicitly gives *national* flows priority over *cross-border* flows, and assumes that network operators will rely on counter-trading only to a limited extent. If this was the approach assumed in Sweden, it might have led to full congestion shifting in violation of Article 102 TFEU. Hence, depending on the actual implementation of the CACM network code, congestion shifting may still be possible.¹⁶⁴

Moreover, congestion shifting can take place not only during the calculation of flow-based transmission capacities, but also later, during the so-called validation phase. Namely, once the flow-based capacities are determined in a coordinated way for a region, they still need to be validated for each border by both neighbouring TSOs. During the validation process, TSOs can correct the capacities for reasons of system security.¹⁶⁵ The CACM network code seems to be stricter than the CM Guidelines as it allows for cross-border capacity reduction *only for reasons of system security*, while the CM Guidelines allow for congestion shifting not only for security reasons, but also for cost-effectiveness and minimizing negative impacts on the internal electricity market.¹⁶⁶

While some provisions of the CACM network code leave scope to TSOs to shift congestion, other provisions impose reporting obligations, which might make congestion shifting more transparent and easier to detect. Firstly, TSOs need to report all reductions of cross-border capacities during the validation process, and to justify those reductions.¹⁶⁷ Secondly, they need to list the location and frequency of congestion in their system, and provide a technical analysis of the existing price zones.¹⁶⁸ In their reports, TSOs may recommend changes in the price zone configuration. On that basis national energy regulators can launch a review of existing price zones, and split, merge, or adjust their borders, taking into consideration internal bottlenecks and loopflows in a meshed network.^{169 170} This can lead to more efficient delineation of price zones in the long run.

In summary, the new CACM network code is likely to affect existing methods of relieving internal congestion. In particular, establishing a region-wide set of remedial actions necessitates harmonisation of

¹⁶³ Contingencies might include a failure of a single or multiple transmission lines, a sudden breakdown of a large power plant, or overloading of a transformer. Network operators often use an N-1 (or N-2) rule, which means that the network needs to remain stable even if one of its N components (or two components) breaks down.

¹⁶⁴ We see two reasons why the network operators could still shift congestion in the new model of regional capacity calculation set up by the upcoming CACM network code. (1) According to Article 30 (4) of the CACM network code, ENTSO-E's final proposal of 27 September 2012, *supra* n 151, in order to determine the available network capacity, network operators should try to maximize the available capacity by foreseeing non-costly remedial actions, (such as changes in network topology), but should not take into account costly remedial actions (such as counter-trading). Hence the capacity that is made available for cross-border capacity is calculated in such a way that there is no need to rely on counter-trading to eliminate congestion. As shown in our companion article, *supra* n 55, this is actually identical to the alleged abuse of SvK. (2) In the flow-based regional capacity calculation model electricity system will be represented with one node for each price zone, and the network operator needs to specify the so-called Generation Shift Keys, that is, how much an increase in electricity production in its price zone will affect the flows on each of the lines in the regional model (Article 29 of the CACM network code, ENTSO-E's final proposal of 27 September 2012, *supra* n 151). However, in reality, not all generation plants are located in the same location within the price zone, and the impact of a production increase on congestion will depend on the precise location of production. The network operator therefore needs to make assumptions on the typical location of generation within its network. For the Swedish network, SvK is likely to assume that cheap hydro power plants in the North are operating at full capacity, and therefore put a lot of weight on those production levels, leaving less capacity for cross-border trade.

¹⁶⁵ Article 31 of the CACM network code, ENTSO-E's final proposal of 27 September 2012, *supra* n 151.

¹⁶⁶ Article 31 (3) of the CACM network code, ENTSO-E's final proposal of 27 September 2012, *supra* n 151. The code defines system security as "the ability of the power system to withstand unexpected disturbances or contingencies" (Article 2 (2)), while the CM Guidelines refer to operational security. We assume here that those concepts are identical.

¹⁶⁷ Article 31 (5) of the CACM network code, ENTSO-E's final proposal of 27 September 2012, *supra* n 151.

¹⁶⁸ Article 40 of the CACM network code, ENTSO-E's final proposal of 27 September 2012, *supra* n 151.

¹⁶⁹ With loopflows, zone borders do not necessarily need to be at the congested transmission lines.

¹⁷⁰ A review of price zone configuration can also be launched upon recommendation of ACER. See Article 37 (1) of the CACM network code, ENTSO-E's final proposal of 27 September 2012, *supra* n 151.

national arrangements. Despite that, congestion shifting will still be possible during the coordinated capacity calculation process. First, a flow-based capacity calculation method primarily addresses discrimination between different cross-border flows, but still implicitly gives national flows priority over cross-border flows. Second, TSOs can still shift congestion during the capacity validation phase, even though deviating from flow-based capacities is made more difficult (i.e. it can be done for system security reasons only). Nevertheless, additional reporting provisions improve transparency and trigger procedures which might mitigate the problem of congestion shifting in the long run, by introducing changes in network topology.

4. Limits of the EU regulation

Under the existing EU regulatory regime SvK would not be required to introduce market splitting in Sweden or to cease congestion shifting and increase counter-trading. The EU law regulates *cross-border* congestion management, whereas TSOs are free to choose their own methods to solve problems with internal congestion. Even though the EU law generally prohibits congestion shifting, because it reduces cross-border transmission capacities in favour of national network users, it leaves a wide scope of exception to this prohibition, allowing TSOs to shift congestion when needed and justify it on grounds of (a) operational security, (b) cost-effectiveness, and (c) minimization of negative impacts on the internal electricity market. The upcoming CACM network code attempts to harmonise congestion management at regional level, but still leaves scope for congestion shifting, even though deviating from flow-based capacities will be limited to (a) operational security only.

Given our discussion on the EU regulation of congestion management, we conclude that the commitments offered by SvK went beyond what the Commission could achieve on the EU regulatory front. While the EU regulation in force can only promote efficient management of *internal* congestion, without imposing on TSOs any specific congestion management method, the Commission, by means of competition enforcement, actually pushed through market splitting in Sweden. The same could be said with regard to the interim remedy. SvK committed to relieve internal congestion primarily through counter-trading and not to shift congestion to the borders, as long as it found available regulating resources.¹⁷¹ A regulatory equivalent of this remedy would amount to an outright ban on congestion shifting, whereas the EU regulation allows for broad exemptions so network operators can continue their current congestion management methods.

The existing EU regulation appears to have reached its limits in terms of controlling congestion shifting. The deficiency of the legal framework derives to some extent from the Union's limited competence to regulate energy markets. The current CM Guidelines regulate *cross-border* congestion management only, whereas congestion management on national electricity lines does not underlie the provisions of the EU Regulations, but remains in the Member State's sphere of competence and is regulated in national network codes. As a result, transmission networks are governed by an unwieldy dual legal regime.

We believe that further regulation based on this artificial separation of the transmission network into cross-border and national lines will prove to be a futile exercise, given the physical complexity of transmission

¹⁷¹ In fact, SvK argued in the case that it would not be possible to completely eliminate congestion shifting and rely on counter-trading, due to lack of sufficient regulating resources. See Commission Decision, *supra* n 2, 49. In practice, SvK did shift congestion to the borders in the interim phase, whereas counter-trading could not be carried out, most often due to unavailability of suitable regulating resources in a given area. See Svenska Kraftnät, 2009/481, Swedish Interconnectors – COMP Case No 39.351, Monitoring Reports 1 – 7, available at <http://www.svk.se/Start/English/Energy-Market/Electricity/Bakgrund/> accessed on 1 November 2012. This does not change the fact, however, that the interim procedure, giving priority to counter-trading, was aiming at complete elimination of congestion shifting.

systems. In a meshed network, any national transaction will also affect electricity flows over cross-border transmission lines, and by the same token, any international transaction will affect electricity flows over national transmission lines. Technically, it is thus impossible to separate national lines from interconnectors. Treating them as legally independent problems only frustrates progress in congestion management.¹⁷²

In our opinion, it would not make sense for the Commission to outright prohibit or limit congestion shifting under the EU regulation. Instead, we would suggest that the Commission, through or in cooperation with ACER, national energy regulators and TSOs, tackles market design head-on, using a more economics-based approach. International transmission capacity should be determined by balancing the costs of counter-trading against the benefits of cross-border trade. A large number of price zones should be introduced in order to limit the cost of counter-trading and ensure correct locational price signals.¹⁷³ Once an efficient market design is in place, the legal discussion of congestion shifting will fade away. The upcoming CACM network code, taking a more comprehensive approach to congestion management, is somewhat promising in that respect. We hope that the new provisions will not ignore the organisation of internal congestion management schemes, consider the possibility of more price zones, allow for cross-border counter-trading, and integrate internal and cross-border congestion management.

E. CONCLUSIONS

Our article illustrates how the Commission uses competition rules in the *SvK* case to foster electricity market integration in the Nordic countries. We analyse this case against the backdrop of political debate on market splitting that was ongoing in the Nordic countries, particularly in Sweden, and the existing EU regulation on cross-border congestion management.

We find that the Commission employed Article 102 TFEU in a rather contrived manner by considering national congestion management an EU internal market problem and therefore also a competition law problem. Namely, it argued that *SvK* hampered cross-border trade and discriminated on the basis of nationality, thus violating competition rules. Whereas the Commission's anticompetitive analysis focused on internal market issues, important aspects of *SvK*'s alleged abuse could have been objectively justified. For example, there could have been possible efficiency benefits of shifting congestion and maintaining a single electricity price in public interest. But these possible objective justifications were left off the table by the Commission.

Dealing with the *SvK* case under commitment procedure made it easier for the Commission to put market integration arguments under the umbrella of Article 102 TFEU and to use competition policy to reach its objective of an integrated electricity market. The standard of proof is much lower in the commitment procedure. The Commission is not required to find an abuse, but merely to formulate its anticompetitive concerns. And there exist no formal procedures which would take objective justification into consideration. Even though market

¹⁷² Fortunately, this problem is well-understood by the stakeholders and some aspects are voluntarily harmonized at the regional level. For instance, even though EU law regulates the use of cross-border congestion rents, Nord Pool applies this provision also to congestion rents collected from internal bottlenecks.

¹⁷³ In order for network users to receive the right signals for their consumption, production and investments decisions, prices should reflect the cost of electricity and therefore be differentiated according to location. Prices should be lower in Nord Sweden where cheap hydro production is available and higher in Stockholm, because both setting up generation plants in South Sweden as well as building transmission lines to transport cheap hydro power from Nord Sweden is costly.

participants have an opportunity to share their views on commitments in the market test, this phase is quick and their concerns can be too easily dismissed by the Commission.

The Commission's focus on fostering market integration through competition policy might backfire, as its assessment lacks solid economic underpinnings, and does not provide correct insights as to how congestion problems should be solved. Furthermore, it does not contribute to the development of a sound EU regulatory framework for congestion management. Had the Commission instead used an efficiency standard in its anticompetitive analysis, it would have resulted in a more nuanced assessment as to whether SvK abused its dominant position by shifting congestion. A thorough economic analysis of the case would have provided more lessons for congestion management in other regions in Europe and contributed to the development of the EU network codes.¹⁷⁴

As a result of this case, SvK changed its congestion management by introducing market splitting in Sweden. Market splitting is a transparent and efficient way to deal with congestion, which, unlike counter-trading, gives optimal, long-term investment incentives to generators and brings the network operator additional revenue to finance future grid investments. Therefore, we believe that market splitting provides an economically sound solution to Swedish congestion in the long run. However, market splitting alone does not prevent future potential abuses, as SvK could still manipulate capacity declarations in order to relieve internal congestion. In any case, market splitting brings more transparency to the market, and thus simplifies detection of congestion shifting.

Judging from the SvK case, competition enforcement appears to be a convenient industrial policy tool for the Commission in situations where there is no significant progress on the EU regulatory front and where national interests and industry groups successfully defend existing market arrangements. The Commission's antitrust action against SvK changed the Swedish congestion management system in a surprisingly fast and unproblematic manner. Neither Swedish policy makers, nor the existing EU regulation could have achieved the same result as quickly and effectively. However, we do not believe that the Commission is likely to use similar antitrust actions against other network operators, and will, for the time being, allow ACER, national energy regulators and ENTSO-E to harmonise congestion management regimes at the EU level by issuing further regulatory measures based on the 3rd Energy Package in the form of guidelines and the EU network codes.

It was relatively easy to introduce market splitting in Sweden, as local political support for market splitting was growing, preparatory steps of splitting the Swedish market were ongoing, and the market players had a decade-long experience with market splitting in Elspot, the Nordic day-ahead electricity market. This might be hard to repeat elsewhere, given that governments are generally hostile towards market splitting, and market participants are inexperienced with respect to new methods of congestion management. An efficient solution to a complex techno-economic problem such as congestion management is certainly not going to come from competition policy alone, but also through changes on the regulatory front. Efficient EU network codes need to be put in place and enforced, and capacity declarations need to be monitored by the national energy regulators. The problem of congestion shifting is probably only going to be solved once cross-border and internal congestion are treated identically, and sufficiently small price zones are introduced. This will require close coordination between power exchanges and network operators, and clear guidance from sector-specific regulation, both at the EU and national levels.

¹⁷⁴ See n 160.